No. 3786 1306

IN THE 1306

United States Circuit Court of Appeals

For the Ninth Circuit

Northern District of California

JOHN E. GILCHRIST.

Appellant,

VS.

On Patent 977.613 Dated December 6, 1910, for Logging Block

F. B. MALLORY COMPANY, Appellee.

BRIEF FOR APPELLANT.

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BRIEF FOR APPELLANT.

This suit originally involved two patents issued to the plaintiff-appellant for self-oiling pulley blocks used in that peculiar branch of logging known as the "High Line Lead" or "Sky-Line" System.

Gilchrist is a manufacturer of logging apparatus located at South Bend, Washington, and doing business under the name of Willapa Harbor Iron Works. He has three patents issued to him relating to pulley blocks; one in 1904 (not in issue); one in 1910; and one in 1913.

The suit was originally brought on the 1910 and 1913 patents. The 1910 patent No. 977,613, issued December 6th, 1910, was held void for anticipation and for want of invention. The 1913 patent was held not infringed.

On this appeal we shall urge error only in respect to the 1910 patent, since we are convinced, after a careful study of the record, that the finding with respect to the 1913 Improvement Patent is substantially correct.

Assignment of Errors Relied On (R. 31).

It is urged on this appeal:

- (1) That the trial Court erred in holding that Claims 1, 4 and 5 of the Gilchrist patent No. 977,613, issued December 6th, 1910, are respectively made up of elements old in the art which perform no new function, disclose no new mode of operation and produce no new result.
- (2) That the trial Court erred in holding that these claims are invalid for lack of patentable novelty.
- (3) That the trial Court erred in holding that the novelty of these claims resides in any individual element rather than in a combination.
- (4) That the trial Court erred in holding that these claims involve merely an aggregation of old devices and that each of said claims fails to disclose a combination.

- (5) That the trial Court erred in holding that these claims are invalid for want of invention.
- (6) That the trial Court erred in holding that the several elements of the claims in controversy functioning in cooperation as a logging block of superior utility, do not, as to each claim, produce any new result.

Statement of Facts.

As the records show, the method of logging in the Northwest up to about the year 1898 was with ox-teams and horses, the movement of the logs under such a system being necessarily slow, and when a pulley or tackle block was used to assist in moving the extra heavy logs, it was a simple block, usually home-made by the camp blacksmith, consisting of two sides of boiler plate, a bearing pin between and a sheave rotating on the pin. Such blocks were oiled with a common squirt oil can.

A few years later, in 1900 or thereabouts, steam logging was introduced, the steam donkey engine coming into general use, and at first the same boiler plate block was used, which had to be oiled with a squirt can every time you "took a pull". About 1902-3 the compound block made its appearance, the grease or compound, or "hard oil", as it was called, being fed by pressure through an axial opening in the bearing pin and out through radial holes to the surface of the pin, thus feeding the lubricant to the bearing surfaces of the pin and rotating

sheave. The pin was made hollow to hold a small supply of grease and a plug screwed into the outer end of this chamber forced the grease as described to the bearing. Also the "grease cup" block was used a little later and an elbow extension of the pin which fed grease or oil to the bearing. This type of block with a supply of grease which was forced to the bearing by pressure, or the outside elbow and grease cups, were never satisfactory nor held up to the work, being a constant source of expense and delay; the grease cups and elbows got broken off and blocks so equipped demanded hourly attention to screw up the plugs or caps to force the grease to the bearings, or to renew the oft broken elbows and The slightest neglect resulted in the grease cups. sheave bushings burning out and scoring the bearing pins, with a consequent tying up of the logging operations, until a new block was substituted or the old block repaired, a costly experience, but a common one.

Many attempts were being made from 1900 on to provide a satisfactory block, but none were forth-coming until the patented self-oiling block of Gilchrist in 1910. Mr. Tyler, a practical logger, testifies that he worried along with the grease cup type of block for seven or eight years, until he got hold of a Gilchrist self-oiling block in 1910, which proved to be a "perfect success". This was the common experience in the logging industry from 1900 to 1910. Mr. Owen, another logger, states that the Gilchrist type of block is a particularly good block

because of the combination of the long bearing pin and hub, the oiling device and the hinged top. Gilchrist had taken the final step which solved the logging pulley block problem. Admittedly, every feature of Gilchrist existed here and there separately in the prior art, but it was left to Gilchrist to take the step that won him practical recognition as solving a long existing want.

Plaintiff's catalogues indicate (Exh. 40, 1914 catalogue, and Defts. Exh. 3-W, 1917 catalogue) that Mr. Gilchrist was a manufacturer of logging tools as early as 1900. It is unfortunate that the health of complainant made it impossible for him to take the stand and testify as to his activities in this important northwest industry (R. 207). Ever since Mr. Gilchrist stated business at South Bend, Washington, he has been manufacturing pulley blocks and experimenting to improve them (R. 208), having taken out fourteen patents in all covering logging equipment, six of which relate to pulley blocks.

The invention in issue was developed and reduced to practice as early as October, 1909 (R. 206). Quite promptly thereafter application for the patent in suit was filed on March 23rd, 1910. From that time forward the business of Mr. Gilchrist has been the manufacturing and selling of his patented pulley blocks and this business has steadily increased until it now constitutes a large part of his output.

The defendant-appellee, F. B. Mallory Company, was incorporated in 1912 (R. 72).

Mr. Mallory had previously testified (R. 78):

"I first heard of the Gilchrist blocks in about 1910 and 1911; I sold a few of complainant's blocks at that time subsequent to the issuance of the patent in suit; I don't know whether they were marked patented at that time or not. I ordered such blocks from the Willapa Harbor Iron Works (the complainant's trade name) and sold them to the trade. I first began the manufacture of my self-oiling block in March, 1914; the Clarke County Iron Works made the patterns for me in February, 1914."

On page 80 of the Record appears a copy of a telegram (Plaintiff's Exhibit 11) dated *October 31st, 1913,* from Mallory to the Willapa Harbor Iron Works, reading as follows:

"Express twelve inch trip block oil reservoir cross head and hook. Ship today by freight two only twenty-four inch Hercules logging jacks number two. One only number three."

It was immediately following the dispatch of this telegram or about that time, that Mr. Mallory says he began *making sketches* for the design of his block which is claimed to infringe. He says (R. 79) concerning the drawings and patterns:

"They were made from ideas that were given to the pattern makers. * * *

"From sketches that I submitted to the pattern maker or salesman.

"Q. Where did you get these suggestions from?

"A. From my imagination, I suppose, ideas that came." (Italics ours.)

It is significant that Mr. Mallory at the same time that he was drawing on his "imagination" he also, by his telegram of October 31st, supra, drew on the plaintiff for a patented self-oiling block.

Also we must not forget that when Mr. Mallory was drawing upon his "imagination", he had before him in his catalogue of 1911 cross section cuts of the Gilchrist block, which gave all the information which might be necessary for any one to have who desired to make models or patterns of the Gilchrist block. So we find that at the time of making such sketches, based upon his "imagination", Mr. Mallory not only had a self-oiling block of the complainant in his possession, but he also had cross-section cuts of said block in his own catalogue.

If the Mallory self-oiling block was developed from said sketches of Mr. Mallory, it is curious that the Mallory self-oiling block should so closely duplicate the Gilchrist self-oiling block.

ORAL RECOLLECTIONS CANNOT PREVAIL AGAINST REASON-ABLE INFERENCES FROM CONDUCT.

Woods v. Cleveland Co., 4 Fish, Pat. Cas. 550; Atlantic Works v. Brady, 107 U. S. 192.

The natural tendency of the human mind to attach self-credit and deprecate like qualities in others is interestingly illustrated in Mr. Mallory's case. Thus at R. 85 he testifies:

"I made the application for design patent upon these blocks because a design patent is very inexpensive and it was the design we wanted to protect more than anything else; I did not think that there was any mechanical function to be patented nor anything new about these blocks; we are still operating under design patents."

And, again (R. 231):

"The blocks shown in our advertisements have a distinctive design of their own, in shape, form, style of sides and pin arrangement; I was the first man to get out blocks of this distinctive design: the first sky-line and high-lead blocks of this design with auto-lubricating sides were put out by the defendant in March, 1914."

However, we have already seen how in April, 1911, when Mr. Mallory was seeking an exclusive territory under the Gilchrist patented block that he recognizes it as something entirely new.

"It is quite common for those who are appropriating the results of another's labor or inventive genius to attempt to belittle the device so appropriated, and insist that it required no exercise of the inventive faculty to produce it."

Blodgett, J., in Manufacturing Co. v. Rathbone, 26 Fed. 262.

"There are always those who are ready to gather where they have not sown. The number and ardour of the conflict is usually in proportion to the value of the prize at stake."

Mr. Justice Swayne in Rubber Co. v. Goodyear, 9 Wall. 793.

A distinguished English patent judge has said:

"Better evidence of the utility of an invention can not possibly be had than the fact that the defendant has attempted to infringe it."

Kay, J., in Lucas v. Miller, 2 R. P. C. 155, 160.

As Judge Buffington has said:

"It is improbable that men will render themselves liable to actions for infringement unless infringement be useful."

Goss Printing Press Co. v. Scott, 108 Fed. 253, 258, 47 C. C. A. 302 (C. C. A. 3rd).

"When the patentee has produced a structure which inaugurates a new industry and at once becomes popular, and therefore of great value, the Court should be zealous so to construe the claims as to give validity to what it believes to be a meritorious invention. * * * The infringing structure in this action is the result of another effort of the defendant to secure all the benefits of the McCann structure without the consent of its owner, by making a few formal inconsequential changes in no way altering the paramount and essential features of the invention."

Coxe, J., in Auto Vacuum Freezer Co. v. Sexton Co., 239 Fed. 898, 900, 901.

It should be observed in passing, however, that Mr. Mallory's statement that his block was gotten up from drawings or sketches or designs furnished by him is not in accord with the testimony of Mr. Hirschbeuhl (R. 95), a witness on behalf of de-

fendant and the machinist who did the work for Mallory. He testifies (R. 95):

"Q. Will you kindly explain to the court just how that oil reservoir block was developed and from what information you started and how

you completed it?

"A. Well, Mr. Mallory, he was anxious to get a block with an oil reservoir side, so he used to come over. Of course, he was a large customer of ours and he always had lots of work done at the shops, so Sunday morning was a convenient time for him to come over and talk matters over, so we were talking over this block one time and he asked me if there couldn't be a way devised without much expense and without too radical a change to make an oil block—an oil side—a block side with an oil reservoir. So it happened that we were walking through the shop and we just noticed this block side here."

The block side that he refers to is said to be the old type Mallory block.

As far as the evidence goes, and considering the long lapse of time, it is not a too violent assumption that they were talking about the Gilchrist block and had the Gilchrist block as well as the Mallory catalogue of the Gilchrist drawings before them. At least that would be the ordinary and usual way of setting about to build something. Whatever the sources of information and knowledge available to Mr. Mallory, he has nevertheless been an active and aggressive competitor for several years.

Immediately on the infringement of defendant being brought to the attention of Mr. Gilchrist, he gave notice, and then followed a correspondence between the parties extending from November, 1914, until April or May of the following year; this correspondence being set out in the record at pages 64-70, inclusive. This correspondence shows with what deliberation the defendant entered upon the infringement. It also shows that the piracy is sought to be excused on the ground that certain "paper patents", which had been deliberately dug up for the purpose, constituted, in the mind of Mallory's patent solicitors, an anticipation. In other words, Mallory's attitude is not that of one who has set about to design a structure outside the claims of Gilchrist and which, of course, he had a right to do, but he has attempted (and fairly well succeeded) simply to grab the article "lock, stock and barrel" and appropriate it for his own use and set up the plea of "lack of title".

That Gilchrist never acquiesced in the attitude of defendant towards the patent in suit is evident from the record, besides there being absolute lack of any proof of such acquiescence. Not only did Gilchrist continue putting out his blocks bearing the patent date of December 26th, 1910, as required by statute, but notices of plaintiff's patent rights were published from time to time, and which notices were directed to Mallory as well as the rest of the trade, and which notices Mallory admits that he saw.

Instances of such publicity of Gilchrist's rights appear in the "Timberman", a technical journal of the logging industry, of general circulation in the Northwest, which advertisement ran from February, 1916, to August, 1916, and practically from August, 1916, to date. A typical notice read:

NOTICE

"To Users of Self-Oiling Blocks:

"I am the original inventor and patentee of Self-Oiling Blocks under patents issued De-

cember 26, 1910, June 3, 1913.

"I hereby give notice that I will hold legally responsible in damages all infringements of my patents covering the principle of a hollow chamber carrying a lubricant to lubricate the sheave pin."

Then followed a cut of the block with the patent date on it and Gilchrist's name appearing, and under it the following:

"GILCHRIST"
"THE ORIGINAL SELF-OILING BLOCK
"UNIVERSALLY USED
"WILLAPA HARBOR IRON WORKS
"JOHN M. GILCHRIST, PATENTEE."

These public assertions of right on Gilchrist's part, coupled with the intervening War-period between the May, 1915, correspondence between Gilchrist and Mallory and the filing of this suit in May, 1919, afford ample evidence against any claim by Mallory of laches or estoppel. To quote from the recent case of Victor Talking Machine Co. v. Cheney Talking Machine Co., 275 Fed. 444, 447 (decided August 5th, 1920):

"The proofs show and courts will take judicial notice of the extraordinary and abnormal conditions which existed in this country and in the world at large from the spring of 1917 to the spring of 1919, and, in a lesser degree, to the present time. Litigation of this character

was frowned upon by public officials, was discouraged by the courts, and, as far as possible, was avoided by every one. Under these circumstances, it cannot be said that plaintiff has been guilty of such laches as to preclude it from asserting its rights and prosecuting suits for trespasses thereon."

While the lower Court disregarded the affirmative defense of laches and equitable estoppel, it is not unlikely that the defense may be urged anew in this Court and for that reason we shall make brief reference to it.

As to lackes. The defendant began to manufacture the self-oiling block, which is the infringement complained of, in April, 1914. This suit was instituted within six years thereafter.

Equity, by analogy, follows the statutes of limitations, and mere lapse of time which does not exceed the statutory limitations is never held as laches on the part of the complainant in a suit in equity except as aided by other circumstances. In law the complainant could have commenced his suit upon his cause of action at any time within six years, and likewise in equity, the complainant had a right to commence his suit within six years from the date of the infringement, and so long as he was within such six-year period, the defense of laches cannot be sustained.

As to equitable estoppel. It appears that the defendant is really raising a defense, not of laches, but of equitable estoppel. He says, in effect, that he

has been misled by the act or word of the complainant; that by such acts or words of the complainant he has been lulled into a sense of security so that he has placed himself in a disadvantageous position, which it would be inequitable for the complainant to take advantage of.

In the discussion of this matter, it should be remembered that this defense of equitable estoppel is an affirmative one and must be pleaded and proved by the defendant. The defendant must show what act or what word of the complainant misled him to his injury; and the defendant must further show that, relying upon such act or word of the complainant, he was, in fact, misled to his injury. (Columbia Co. v. Searchlight Co., 236 Fed. 135, C. C. A. 9th Cir.) We would ask the defendant to search the record and point out any testimony showing that he was, in fact, misled to his injury by any act or word of the complainant.

See also Rajah Co. v. Belvidere Co., 275 F. 761, C. C. A. 7th Cir., page 764, where the Court said:

"Estoppel: Failure of counsel to distinguish between laches and estoppel may account for some of the confusion which appears in that part of the brief devoted to a discussion of this defense. Appellee contends that it made many spark plugs of the kind and description now complained of, to the knowledge of appellees and without opposition, and that because of appellee's delay in insisting upon its rights it is now estopped to assert its monopoly. * * * True, laches may be one, and a most important element in proving estoppel, but ordinarily, where laches alone is shown, patentee should not

be barred from asserting his rights under the patent so far as future infringements are concerned, though he may, because of that fact alone, be refused damages for past infringements. McLean v. Fleming, 96 U. S. 245, 257, 24 L. Ed. 838; Menendez v. Holt, 128 U. S. 514, 523, 9 Sup. Ct. 143, 32 L. Ed. 526."

See also Beattie v. Smith, 275 F. 164, C. C. A. 2nd Cir.

On the question of laches the Los Alamitos Sugar Co. case, 173 Fed. 280, is directly in point; except in the sugar case the delay in bringing suit after notice was very much longer than in this case. There your Honors said:

"We cannot see that the court below erred in ruling against the appellant's plea of laches. No question in respect to profits or damages is involved on this appeal, the question of the appellee's right to the injunction awarded only being involved. The record shows not only that the contractor employed to build the appellant's dumping apparatus made several examinations of that of Carroll, taking some notes and drawings thereof before undertaking to construct the appellant's device, but that the manager of the appellant company had also a talk with Carroll in respect to the latter's apparatus, and that the manager, on the 12th of June, 1897, was notified in writing by Carroll of the issuance to him of his letters patent, and was expressly warned against infringing upon them."

Manifestly there has been no such unreasonable delay by Gilchrist considering his health, war conditions, etc, in bringing this suit as would justify a

Court of Equity refusing to grant relief to plaintiff on the ground of either laches or estoppel.

OTHER DEFENSES.

While there was a formal defense of non-infringement interposed to the 1910 patent, there is nothing in the record really to support that defense; the imitation of defendant being so close that if it is not a Chinese copy, it constitutes merely a "colorable evasion". It may, therefore, be assumed that infringement is admitted. Of course, under such circumstances the only thing a defendant can do is to defeat the patent utterly, and for this purpose there is invoked the usual defenses of "aggregation", "lack of invention", "anticipation", "prior publication", "prior use", etc.

As to the alleged defense of "aggregation" we need only point the rule recognized frequently by this Court and discussed in the case of Willard v. Union Tool Co., 253 Fed. 48, 53, where it was said:

"The mere fact that human agency intervenes in an operation does not render a combination unpatentable. Nor is it necessary that the action of the elements be simultaneous. Pelton Waterwheel Co. v. Doble, 190 Fed. 760, 111 C. C. A. 488; Burdett-Rowntree Mfg. Co. v. Standard Plunger E. Co. (C. C.), 196 Fed. 43; Novelty Glass Mfg. Co. v. Brookfield, 170 Fed. 946; 95 C. C. A. 516; Krell Auto Grand Piano Co. v. Story & Clark Co., 207 Fed. 946, 125 C. C. A. 394. Nor is it necessary that one of the constituent elements shall so enter into the com-

bination as to change the action of the others. International Mausoleum Co. v. Sievert. 213 Fed. 225, 129 C. C. A. 569. It is sufficient if there be some joint operation performed by the elements producing a result due to their co-operative action. National Cash Register Co. v. American Cash Register Co., 53 Fed. 367, 3, C. C. A. 559; Toledo Computing Scale Co. v. Moneyweight Scale Co. (C. C.) 178 Fed. 557; New York Scaffolding Co. v. Whitney 224 Fed. 452, 140 C. C. A. 138; Ohmer Fare Register Co. v. Ohmer, 238 Fed. 182, 151 C. C. A. 258. And the result itself need not be new. It is sufficient if an old result be produced in a more 'facile, economical, or efficient way.' New York Scaffolding Co. v. Whitney, supra; Pelton Waterwheel Co. v. Doble, supra." (Italics ours.)

Here of course there is the most intimate cooperation and interrelation of the parts of the patented combination.

The oral testimony offered by defendant and the manner it was educed recalls the criticism of the Court in Brown v. Zaubitz, 105 Fed. 244:

"The defendant has called eight witnesses to corroborate his statements. They were examined in 1898 and testified regarding matters which transpired from five to eleven years be-The general course of the examination was to place in their hands the infringing pyrometer and ask them to compare it with the pyrometers which they saw eight, nine or ten years previous. It is unnecessary to dis-The Sucuss this testimony in detail. * * * preme Court had the same situation to deal with in the telephone cases, except that there the alleged anticipation was established by testimony infinitely stronger than that produced here. In rejecting it the Court said: 'We do not doubt that Draubaugh may have conceived the idea that speech could be transmitted to a distance by means of electricity, and that he was experimenting upon that subject, but to hold that he had discovered the art of doing it before Bell did would be to construe testimony without regard to 'the ordinary laws which govern human conduct'. Telephone Cases, 126 U. S. 567, 8 Sup. Ct. 778, 31 L. Ed. 863.

"It is not necessary to denounce these witnesses as perjurers. A much more demulcent and charitable view is that they are mistaken either as to the details of the pyrometer which they saw, or the time when they saw it. The desire to aid a friend, the actual presence of the infringing pyrometer, and the assurance of the defendant that the prior pyrometers were like it in structure may have encouraged imagination to encroach upon the domain of fact; but this is a condition frequently encountered in patent The witnesses may honestly have thought that they saw the platinum strip in a pyrometer made by the defendant prior to 1892. They are in all probability mistaken, but at least there is a doubt about it, and this doubt destroys the force of the defense."

The reasons why evidence of this character should be weighed with extreme caution is well stated in Campbell Printing Press & Manufacturing Co. v. Marden, 64 Fed. 785, where the Court said:

"I cannot find an anticipation on evidence of this character, except in very extreme cases which it is not necessary or indeed practicable now to describe. I will not say that there may not be a case in which evidence of this character may be persuasive. But the essential objection to finding an anticipation under circumstances like the present is as follows: The witnesses, assuming that they intend to speak the truthan assumption which I readily make in this case, as I perceive nothing in the evidence to the contrary—are still, by the very necessity of the case, in a position where mistakes are easily made, and their evidence therefore should be received with great caution. The witness is familiar, in most cases, and notably so in this case, with the device which was patented subsequently to the construction of the machine which is alleged to be an anticipation. In recalling to his memory the construction of the earlier machine, he necessarily has in mind the instruction which he has received from the progress of the art in the meantime. It is, therefore, easy for him to transfer to his early device, the characteristics which he now clearly sees are necessary to the accomplishment of the purpose which was then in mind, and difficult for him accurately to separate his recollection of the machine which was made from his present knowledge of the machine which ought to be made. The inventor who has perfected his invention and described it in his application is entitled to the benefit of the presumption that he is the first inventor; and it seems to me most dangerous to find that he is anticipated except on the most reliable evidence."

THE PATENT IN SUIT.

No claim will be made on this appeal that the Gilchrist patent is a broad pioneer patent. It did, however, represent such an advance in the art and fill such a "long-felt want" as to lay the foundation, in a large measure, of both of plaintiff-appellant's business and defendant-appellee's business and to make possible the commercial development of high lead logging.

The lower Court recognized the merit of the invention but held that because all of the elements of the claims in question were individually old in themselves in the prior art, the patent was void for aggregation and lack of invention. The object of this appeal, of course, is an attempt to correct that error. Judge Bean says (R. 26):

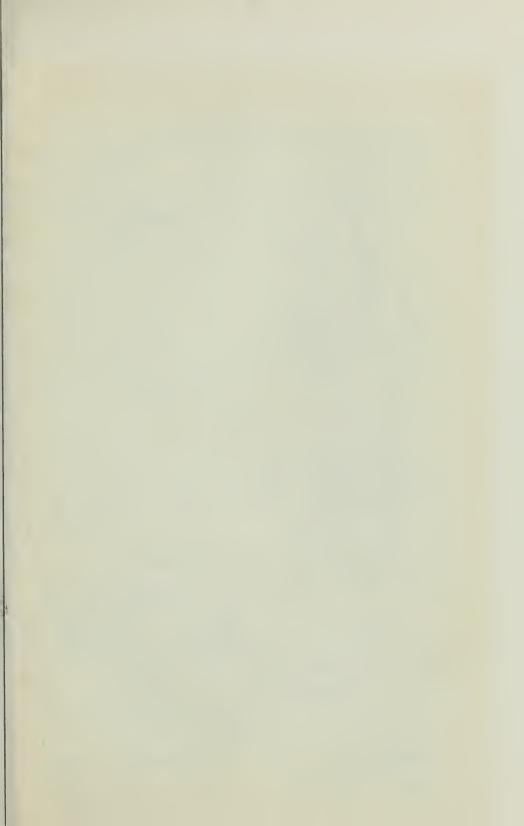
"In reaching this conclusion, I am not unmindful of the presumption of the validity of the patent arising from its issue, or that the auto-lubricating block manufactured by plaintiff has proven its superior utility in the logging business."

Turning to the Gilchrist patent, complainant's Exhibit 1, set out in Volume II of Exhibits, page 3, the patentee states his problem as follows (page 1, lines 8 to 23, inclusive):

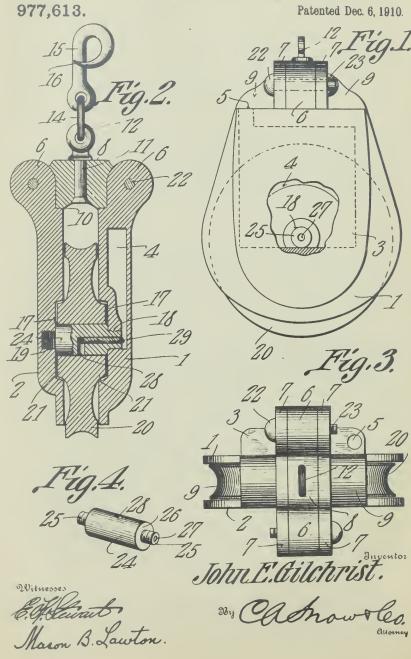
"The pulley block forming the subject matter of this application may be employed under a variety of conditions which will readily suggest themselves to a rigger. However, it may be explained that in logging operations, the line whereby the logs are dragged from the woods to the saw mill, or to the drive, is returned over a series of pulleys, commonly suspended at a considerable elevation. These return pulleys are in constant rotation, and on this account frequently run hot. Owing to their elevated positions, it is difficult to oil them, the oiling process commonly being deferred until it is often found that the pulley has run hot and bound."

He then states his objects (page 1, lines 24-29):

"It is the object of this invention to provide a pulley which will contain a considerable quan-



J. E. GILCHRIST.
PULLEY BLOCK.
APPLICATION FILED MAR. 23, 1910.



tity of lubricant, and feed the same, automatically, and slowly, upon the bearing pin of the pulley.

"* * * to provide a pulley, the bearing pin of which is adequately protected against

dirt and dust." (italics ours.)

We thus find four prime objects:

- (1) This block must hold "a considerable quantity of lubricant"; otherwise it would require refilling just like the old grease cups did.
- (2) It must feed "automatically"; otherwise it would require personal attention like the oiling means of the prior art.
- (3) It must feed "slowly"; otherwise it would quickly lose its lubricant.
- (4) It must be constructed so as to be "adequately protected against dirt and dust"; otherwise the bearings would soon cut out and destroy the pulley.

We will see from the evidence that there was not a single block, either on the market, or patented, described, or known, prior to Gilchrist, that would accomplish these objects.

The patentee then describes his block by reference to the drawings as comprising "parallel sides 1 and 2" (see Fig. 2); the side 1 being made hollow to form an integral interior oil chamber or reservoir 4. This chamber and its top inlet 5 for filling it are shown in dotted lines in the plan view of the block (Fig. 1) and also appears in Fig. 3; the patentee saying that the chamber is provided with "an inlet

5 communicating with the chamber 4, and constituting a means whereby a lubricant may be introduced into the chamber".

When we come to look at the defendant's structure we see that defendant has each of his sides provided with oil reservoirs, so that he carries double the amount of oil that the Gilchrist block provides for, but, of course, that is not a material difference.

The sides 1 and 2 are provided upon their upper edges with outstanding projections 6 which fit between the lugs 7 of the top member 8. Registering perforations in the projections 6 and lugs 7 are adapted to receive the locking pins 22. The construction, as the patentee says (page 1, lines 78-80), "being such that the sides 1 and 2 are hingedly connected with the top 8, by means of the pins 22". A hook 15 or other equivalent attaching means is swiveled in the top 8, as shown at 11, Fig. 2. 20 is the pulley wheel mounted on the axle or bearing pin 24, which latter, as seen in Fig. 2, has reduced threaded ends 18-19 screwing into the adjacent faces of the opposed sides 1 and 2.

By screw-threading the ends of the axle or bearing pin 24 into the sides, it is manifest that the bearing pin is held against rotation. Moreover, by having the ends 18 and 19 of the bearing pin reduced, corresponding shoulders 26 (shown in Fig. 4) are provided, and which shoulders or stepped portion 26 of the bearing pin 24 are adapted to screw up tight against the inside faces of the sides 1 and 2

and not only exclude dirt but more particularly brace the sides against collapse.

Furthermore, by this stepped-end construction of the bearing pin, it is possible to use a good sized pin with a correspondingly greater circumferential area and a like large axle bore in the pulley 20. This tends to long life of the pulley or giving a greater bearing surface than if an ordinary straight pin were used or if the pulley and pin were made integral and the ends of the pin turned in bearings. In either of the latter instances, that is a small stationary pin with a limited bearing area or a rotating pin turning in end bearings, there would be excessive wear.

Since these blocks work at high speed and under terrific strains, the pulley wheels must have as long a bearing as possible. To that end it is noted that the pulley 20 has a long hub bearing, designated as 21 in the drawing; the length of this hub being considerably in excess of the width of the face of the pulley 20. The ends of the hub are accommodated in recesses 17, with the walls of which recesses they have a snug but anti-friction fit. This recessing of the hubs in the walls of the sides provides a protection against the entry of dirt and dust into the bearings between the rotating pulley wheel 20 and the stationary axle 24.

In Fig. 2 it is observed that one end of the bearing pin 24 projects into the bottom of the oil chamber 4 and that there is an annular oil channel or

hole 28 28 made in the bearing pin 24 which is partially filled with wicking 29. This wicking provides for the *slow* feed of the oil from the oil reservoir 4 to the surfaces to be lubricated. All these features are described fully and adequately in the specifications.

For instance, the patentee says (page 1, beginning line 3):

"In the adjacent faces of the sides 1 and 2, are annular recesses 17. At the centers of these recesses 17 are threaded openings 18 and 19, the opening 18 in the side 1 being extended into the chamber 4, at the lower end thereof; while the threaded opening 19 in the side 2 terminates within the contour of said side."

Continuing, the patentee, after referring to the shoulders 25, says (page 2, lines 10-17):

"The sheave 20 is adapted to be journaled for rotation upon the bearing pin 24; and this sheave 20 is provided upon its outer faces with bosses 21, adapted to fit closely, yet anti-frictionally, in the recesses 17 of the sides 1 and 2. The shoulders 26 upon the pin 24, prevent the sides 1 and 2 from bearing against the sheave 20."

Referring to the means for lubricating the pins and for controlling the flow of the lubricant thereto, the patentee says (page 2, beginning line 18):

"In the bearing pin 24, there is an axial opening 27, communicating at one end with the chamber 4. Adjacent the middle of the pin 24, this axial opening 27 is extended through the side wall of the pin, and shown at 28. A packing of some sort, denoted by the numeral 29,

and preferably a piece of cotton wicking, is mounted in the axial opening 27 of the bearing pin."

Continuing, the patentee says (page 2, beginning line 27):

"In practical operation, the lubricant is introduced into the chamber 4 through the inlet 5. The lubricant will find its way slowly through the axial opening 27 of the bearing pin 24, and, passing out through the portion 28 of the opening in the pin, will serve to lubricate the sheave 20 as the same rotates upon the pin. The presence of the packing 29 in the interior of the bearing pin 24, serves to regulate the flow of the lubricant through the pin."

Regarding the hinge action of the top 8 to permit a rope to be looped over the pulley wheel without dismantling the block, the patentee says (page 2, lines 55-73):

"Obviously, when the sides 1 and 2 are separated, the top 8 need not be entirely removed from both of the sides. But one of the pins 22 may be removed, the top 8 being swung back pivotally upon the other pin 22 to permit the side from which the lugs 7 have thus been freed, to be rotated.

"It will be seen that the construction of the device is such, that, although the chamber 4 may be entirely filled with lubricant, the top 8 may be unshackled from the side 2, permitting the said side to be rotated free from the bearing pin 24, whereupon the sheave may be removed, and the pulley block repaired, without materially changing the position of the oil holding side 1 of the pulley block or emptying the chamber 4 of its contents."

As further emphasizing the protection of the bearing against the entry of dirt the patentee says (page 2, lines 74-79):

"The parts 21 of the sheave 20 fit closely in the recesses 17 of the sides of the block, and the bearing pin 24 is so housed and protected that dirt will be prevented from accumulating about the bearing of the sheave, to interfere with the rotation thereof."

The need of just such a construction as thus described in the patent is shown by this account of the practical difficulties of working conditions, by Mr. Tyler, an old-time logger (R. 152-153):

in the use of logging blocks the pull is in every kind of a way you conceive of; with a side thrust pull on a narrow sheave with narrow axle bearing it would mash it right out, would naturally squash it right out on that side; the recesses of the sides and the hubs of the sheave projecting into the recesses in the Gilchrist and Mallory blocks are of benefit for the simple reason it not only protects the block from dirt and dust, keeps it out of the bearings, but it gives a longer bearing on the pin without putting extra weight into the block, you have a stronger block without extra weight by lengthening the hub of the sheave, if you don't do that, in order to have the strength in your block, you would have to have a sheave so big you couldn't do anything with it; in the use of blocks in the woods there is every chance for dirt to get into the block, for it is dragged through the ground, over rocks and sand, and everywhere it could be, to get a chance to get dirt."

THE DEFENDANT'S STRUCTURE.

There are several specimens of the defendant's infringing devices in evidence, as there are likewise several full-sized blocks of plaintiff. The infringing structure is well illustrated by the drawing of the Mallory block Plaintiff's Exhibit 3) and also shown in the Mallory catalogues (Plaintiff's Exhibit 4) and the Mallory logging blocks (Plaintiff's Exhibits 5 and 6). The sale of these blocks is not denied.

Mr. Younie, chief engineer of the Puget Sound Iron & Steel Works and long a designer of logging blocks, testifying for the plaintiff, stated (R. 45) that the drawing of the Mallory block (Plaintiff's Exhibit 3) is an accurate representation of the structure of Plaintiff's Exhibit 6, except as to the upper part of the drawing with reference to the cross-head; that the operation of the Mallory block is identical with the operation of the Gilchrist block, the Mallory block merely having an oil chamber in each side so that the pin has two openings for the passage of oil from each of the oil chambers to the sheave. The operation of the two blocks is identical.

Quoting further from the Record, pages 46-47:

"Witness (Mr. Younie) further compared the Mallory and Gilchrist sheaves and showed wherein they were identical, each having a long extended hub reaching out into the annular recesses; that the function of the long bearing was to increase the bearing surface and reduce the bearing pressure, the amount of pressure per square inch; that logging blocks are subject to terrific strains and loads and if the bearing is narrow, the pressure is so great as to squeeze out the bushings. That the annular recesses of the sides function to provide for the extended length of the pin and the increased area of bearing surface and to accommodate the long hub; also such recesses function to make the block a little less accessible to dirt and foreign matter, and dirt would tend to roughen the surface of the pin, wearing the same out more rapidly than if the bearing were kept clean.

"Witness compared the Mallory pin with the Gilchrist pin and stated that the function of each is identical in that each holds the sides of the block in proper position by having the sides rigidly secured against the shoulders of the pin; that the Mallory pin differs from the Gilchrist pin only as to the number of openings for the admission of oil from the oil chambers; that their functions are absolutely the same."

THE QUESTIONS OF INVENTION AS WELL AS INFRINGE-MENT HAVE OFTEN BEEN DETERMINED BY CONSIDERING WHETHER THE DEFENDANT'S DEVICE IS MORE LIKE THAT OF THE PATENT IN SUIT THAN THE ALLEGED AN-TICIPATIONS. (Dowagiac Mfg. Co. v. Minnesota Moline Plow Co., 118 Fed. 136; National Hollow Brake-Beam Co. v. Interchangeable, 106 Fed. 707.)

In the present instance, as far as the evidence goes, the only self-oiling blocks in use today are the devices of the plaintiff and the defendant. The defendant, although free to adopt any or all of the ancient devices, nevertheless when it came to build its machine and to construct a self-oiling block which would automatically take care of itself for commercial, practical purposes, copied the patented device of plaintiff rather than anything else in the prior art. This of itself strengthens evidence of invention (cases supra).

THE MALLORY ADVERTISEMENTS.

There are in evidence several pages from different issues of the "Timberman" as "Complainant's Exhibit 35", which show varieties of the Mallory advertisements. Thus for January, 1916:

"The universal use of high leads make these blocks of valuable consideration to every logger. In connection with their auto-lubricating feature, the wide throat, which permits full passage of rigging, the heavily constructed sides, large strong shackle and reinforced manganese steel sheaves, recommend them for most severe service." (italies theirs.)

Again, March 1916:

"The auto-lubricating feature allows the block to run from a week to ten days without attention, which means a great saving where block is in an inaccessible place."

Again, June, 1919:

"The trip line corner block pictured here embodies features that every logger will appreciate. Loug bearing manganese steel sheaves heavily ribbed. Large oil reservoirs with capacity for several days' constant operation. A wide sheave that gives ample clearance for

straw line connection, and the extra long bearing insures a cool running block under all conditions." (italics ours.)

Contrast this with March, 1914, issue, ad. of Mallory, which shows old style non-lubricating (Plaintiff's Exhibit 12).

See cut of Mallory, April, 1914, with self-oiling lug bearing, etc., with wick packing and all.

Plaintiff's Exhibit 14, ad. of Mallory, October, 1915, issue, says:

"Certain principles of their construction are protected by patents upon which the counterfeiter cannot safely infringe."

What does that refer to? Certainly none of their own patents, for they have none except a design patent or two.

Again, Mallory's 1917 catalogue, Plaintiff's Exhibit 4, in "Introduction", says:

"The development of logging equipment for Pacific Coast conditions has been marked by a succession of well-defined steps from the first introduction of donkey engines to the more recent methods of skyline and high lead yarding.

During this evolution the improvement in logging blocks has played a most important part", etc.

It is manifest, in running through these advertisements, that there is a well-developed tendency of the defendant to take all the credit of this block development to itself. And still, as said recently in Beattie Mfg. Co. v. Smith, 275 Fed. 164, 109:

"The fact that these advantages seem to be much appreciated by the trade, and that this new method of folding has rendered obsolete the prior method * * * is strong evidence of an advance in the art, and we think indicates invention."

DEFENDANT GIVES THE TRIBUTE OF PRAISE TO THE PRIOR ART, BUT THE TRIBUTE OF IMITATION TO GILCHRIST.

This suit presents the not unusual situation pointed out by Mr. Justice McKenna in the Rubber Tire Case (Diamond Rubber Co. v. Consolidated Rubber Co., 220 U. S. 441), whereby the defendant gives the tribute of his praise to the prior art but the tribute of his imitation to the plaintiff's patented invention.

"The prior art was open to the rubber com-That 'art was crowded', it says, 'with numerous prototypes and predecessors' of the Grant tire, and they, it is insisted, possessed all of the qualities which the dreams of experts attributed to the Grant tire. And yet the rubber company uses the Grant tire. It gives the tribute of its praise to the prior art; it gives the Grant tire the tribute of its imitation, as others have done. And yet the narrowness of the claims seemed to make legal evasion easy. Why, then, was there not evasion by a variation of the details of the patented arrangement? Business interests urged to it as much as to infringement. We can find no answer except that given by the tire company. The patented organization must be one that is essential. Its use in the precise form described and shown in the patent must be inevitably necessary."

THE CLAIMS IN SUIT.

Claims 1, 4 and 5 charged to be infringed are as follows:

- "1. A pulley block consisting of sides, one of which is provided with an interior oil chamber having an inlet adjacent the top of the block; a bearing pin terminally mounted in the sides and having an axial opening communicating with the chamber and extended through the side wall of the pin; and a sheave journaled for rotation upon the pin between the sides.
- A pulley block consisting of parallel sides having annular recesses in their adjacent faces, one of the sides being provided with an interior oil chamber having an inlet adjacent the top of the block; a bearing pin terminally threaded to engage the sides in the recessed portions thereof, the pin having an axial opening communicating with the chamber and extended through the side wall of the pin; a sheave journaled for rotation upon the pin and having oppositely disposed bosses adapted to fit closely but anti-frictionally in the recesses, the pin having shoulders to engage the sides to prevent the same from binding upon the sheave; and a top removably connecting the sides above the sheave.
- "5. A pulley block consisting of parallel sides, one of which is provided with an interior oil chamber having an inlet adjacent the top of the block; there being a threaded opening in the wall of said side communicating with the chamber adjacent the bottom thereof, and an oppositely disposed threaded opening in the

other of said sides; a bearing pin terminally threaded to engage the threaded openings, the pin having an axial opening communicating with the chamber and extended through the side wall of the pin; a sheave journaled for rotation upon the pin; the sides having lateral projections at their upper ends; a top having spaced lugs between which the projections of the sides are adapted to fit; and removable means for uniting the projections with the lugs."

Claim 1, while broader than claims 4 and 5, must, with respect to the "interior oil chamber", the terminal mounting of the bearing pin and the other elements therein mentioned, be construed with respect to the meaning that those terms have as used in the Gilchrist specifications and as shown in the drawings.

The fundamental rule of claim construction is that the claim should, if possible, be construed to cover the actual and entire invention of the patentee (Los Angeles Art Organ Co. v. Aeolian Co., 143 Fed. 880, C. C. A. 9th Circuit).

What the "actual and entire invention" of the patentee is can only be ascertained by reference to the specifications and drawings. Thus in interpreting the broad and general language of a claim it is proper and necessary to refer to the specifications and to confine the meaning of the claim to such a combination and to such elements as will produce the desired result, with the elements functioning in the manner of the inventor's concept.

Thus Robinson on Patents, Vol. II, page 498:

"In thus construing the claims of a patent by its descriptive portions, the scope of the claims may often be restricted, but can never be enlarged. The claims are based on the description, the invention secured to the patentee being always identical with or contained in that communicated to the public; and therefore the interpretation given to the claims must limit them to the invention previously described, however wide and comprehensive they might otherwise appear."

In the case of Anderson v. Collins, 122 Fed. 451, the patent related to a roller bearing and the 10th claim defined "roller elements located in the race formed thereby, ball separating devices between the roller elements of the housing, for confining the roller elements". The prior art was such that the claim was anticipated unless the roller elements were construed narrowly to be balls and not wheels or cylinders, and unless the ball separating devices were construed to be rotating ball separating devices. The Court, in order to save the claim, construed the roller devices to be ball roller devices, and the separating devices to be rotating separating devices. The Court's statement as to this question is as follows:

"Much has been said in argument and written in the briefs to show that the tenth claim of the patent in suit is so broad and general in its terms that it covers devices in which the main bearing elements are cylinders or wheels, and in which the separating devices are not rotatable; and that, when it is read in this way, the combination it describes is anticipated by several of the patents to which reference has been made. But the claims of a patent must be read in the light of the specification which accompanies them. The specification may always be referred to to restrict, though not to expand the claims. And, when this tenth claim is read in the light of these familiar rules, its true construction limits it to a housing for the balls and the rotatable separating devices between them described in the specification; and when it is thus read no anticipation can be found in the prior patents."

The Court of Appeals of the Sixth Circuit (Lurton, Day and Severns sitting) has also enunciated the same principle very emphatically in the case of Lamb Knit Goods Co. v. Lamb Glove & Mitten Co., 120 Fed. 267. In that case the subject-matter involved was a glove, and the prior art was such that, unless the glove was construed to be a *knit* glove, the claim was anticipated by the prior art. Claim 1 did not specify a knit glove or knit fabric, but read as follows:

"1. A glove formed of two blanks, the hand blank having finger pieces formed thereon, and narrowed at the point where the thumb is attached, and of a uniform width from the thumb to the wrist, and the thumb blank having its upper portion knit goring, substantially as described."

The Court held that, in view of the specification and the drawings, the claim should be construed narrowly to refer to a *knit* fabric, such construction being given in order to save the claim from an-

ticipation. The Court's statement in the case is as follows:

"It is the settled rule in patent law that claims must stand or fall as made (Keystone Bridge Co. v. Phoenix Iron Co., 95 U. S. 274, 278; 24 L. Ed. 344); but it is equally well settled that the claims of a patent are to be construed by reference to the specifications (of which the drawings form a part), and that such reference may be had, not for the purpose of expanding the claim, but for the purpose of defining it and limiting it to the description of the invention (McClain v. Ortmayer, 141 U. S. 419; 12 Sup. Ct. 76; 35 L. Ed. 800; Howe Mach. v. National Needle Co., 134 U. S. 388; 10 Sup. Ct. 570; 33 L. Ed. 963; Coupe v. Royer, 155 U. S. 565; 15 Sup. Ct. 199; 39 L. Ed. 263; Tilghman v. Proctor, 102 U. S. 729, 730; 26 L. Ed. 279.) And within certain limits the courts are inclined to adopt this mode of construction when it is necessary, as in the present case, to save the patent from the objection that the claims are too broad. Rubber Co. v. Goodvear, 9 Wall. 788, 795; 19 L. Ed. 566; McClain v. Ortmayer, supra; Coupe v. Royer, supra, 577; Soehner v. Stove Co., 28 C. C. A. 317; 84 Fed. 182."

The Supreme Court has squarely and unequivocally indicated that it approved of the doctrine of construing claims more narrowly than their terms, in view of the specification (Carnegie Steel Co. v. Cambria Iron Co., 185 U. S. 403). The process of the patent in suit in that case referred to the mixing of metal from blast furnaces, but the second claim said nothing about metal from blast furnaces, but merely specified "the art of

mixing molten metals to secure uniformity of the same in its constituent parts preparatory to further treatment". The Court held that the specification should be referred to to ascertain the character of the metal, and that "the metal" should be construed to mean metal from blast furnaces, and not from *cupolas*, there being considerable question, in view of the art, as to the validity of the claim if construed broadly enough to cover the mixing of metal from cupolas. We quote below the statements of the Court upon this point:

"The second claim apparently extends to the art of mixing all molten metals, but the specification, taken in connection with the disclaimer. which describes a process designed to dispense with the use of cupolas, shows that it was intended to include metal tapped from blast furnaces and was probably intended to be limited to that. Whether the claim would be void if construed to include cupola metal, it is unnecessary to consider. It clearly includes metal from blast furnaces, and is not rendered void by the possibility of its including cupola metal. The claim of a patent must always be explained by and read in connection with the specification, and as this claim clearly includes metal taken from blast furnaces, the question whether it includes every molten metal is as much eliminated from our consideration in this case as if it were sought to show that the word 'metal' might include other metals than Were infringement charged in the use of an apparatus for mixing cupola metal, the question would be squarely presented whether the claim had been illegally expanded beyond the specification."

The Circuit Court of Appeals for the Eighth Circuit in Brammer v. Schroeder, 106 Fed. 918, 929, speaking of the interpretation of claims, says:

"It is true that neither they nor the specification can be read to expand the claim; but the specification and the drawings must be read together, and given their obvious force and meaning, for the purpose of determining what devices are pointed out and described therein. When the specification and drawings of this patent are so read, the extension of the driving shaft beyond the pinion so that it will engage with the flange on the cylinder, and every other mechanical device requisite to unite the essential elements of the combination claimed, and to make it complete and operative, are plainly pointed out and described."

On this same point Judge Gray in Washer Co. v. Cramer, 169 Fed. 629, speaking for the Circuit Court of Appeals, conceded that the terms of one of the claims of the patents there in suit was fully met by the prior art,

"if we stick in the bark by looking at the language of the claim, dissociated from the specifications; but no invention can be practically or fairly understood or explained, if such dissociation is absolutely adhered to."

Nevertheless the claim was held valid. Consequently when we come to consider the prior art and seek to compare it with the Gilchrist claims, we have to keep in mind the meaning of the elements used in Gilchrist as defined in Gilchrist's specifications, and to measure the entire invention of Gilchrist with that which it is sought to show as an anticipation.

INVENTION.

The Honorable Court in holding the Gilchrist patent invalid says (R. 27):

"The question whether a patent involves invention is one of fact for the Court, to be answered in the light of all the pertinent considerations including the prior art, and so viewing the complainant's patent I am of the opinion that it is invalid for want of invention."

This immediately raises two questions:

- 1. What is invention?
- 2. What are the facts under which invention or lack of invention is to be predicated?

No better definition, to our knowledge, has ever been given of "invention" than the short one that "It is the production of new means to fill a want".

The second question would be answered, apparently, by an ascertainment of the "want", provided such a "want" existed in fact; and whether or not, as a matter of fact, the invention in suit had fulfilled the "want". If there was a want and the prior devices fell short of fulfillment, then there must have been left something for subsequent inventors. True, it may have been only the "last step" to convert failure into success, but that has often been held to be the touchstone defining invention.

Barbed Wire Patent, 143 U. S. 275; Expanded Metal Patent, 214 U. S. 366.

Complainant enters this Court with the presumption of law that his patent is good and valid and

covers patentable subject-matter over everything theretofore known. This presumption arises from the grant and issuance of a patent and is a statutory presumption. In any case where the question of patentable novelty is close or in *doubt*, this presumption, arising from the grant and issuance of the patent, must throw the decision in favor of the validity of the patent, so that if there were any *doubt* as to the patentability of the subject-matter of the patent in suit this prima facie presumption must control and the patent must be held valid (Morgan v. Daniels, 153 U. S. 120; Cantrell v. Wallick, 117 U. S. 679).

And this presumption is of such legal effect that

"Evidence to overcome the presumption of invention arising from the issuance of the patent must be conclusive on the question."

Enc. of Evidence, fol. IX, page 627;

Wilkins Shoe B. F. Co. v. Webb, 89 Fed. 982;

Regina Co. v. New Century Music Box Co., 138 Fed. 903.

Or, as otherwise stated, in order to overcome this presumption arising from the grant and issuance of the Letters Patent, the proof offered by defendant must be both reliable and certain. In case of any doubt the presumption must control the finding of fact (Osborne v. Glazier, 31 Fed. 402; Edward Barr Co. v. Sprinkler Co., 32 Fed. 80; Walker on Patents (4th Ed.), Sections 491, 494; Robinson

on Patents, Section 423; Harper & Reynolds Co. v. Wiltus, 56 Fed. 588; Hunt Bros. Fruit Packing Co. v. Cassidy, 53 Fed. 259 (C. C. A. 9th Cir.).

If the prior art failed of success and the device of the patent succeeded where there had only been failure previously, then there can no more be "anticipation" or "lack of invention" in the patented device than can a patented failure be infringed by a successful machine. In other words, a successful machine cannot find its equivalent in an unsuccessful one. That is as true in testing the validity of a patent as it is in measuring infringement.

American v. Fibre, 90 U. S. 566; 23 L. Ed. 31; Gordon v. Warder, 150 U. S. 47; 37 L. Ed. 992.

It is a well-settled rule of law that

"the unsuccessful experiments of others tend to show the exercise of inventive genius by the one who first produced a successful result."

Ham Co. v. Dietz Co., 13 C. C. A. 690.

As said in General Electric Co. v. Wagner Electric Co., 130 Fed. 772:

"Where a prior device is set up as an anticipation of the complainant's patent and it appears that the defendant did not use or improve upon it, but adopted complainant's, the prior device is not an anticipation."

Evidence of doubtful probative force will not overthrow the presumption of novelty and orig-

inality arising from the grant of letters patent for an invention.

Smith v. Fay, 6 Fis. Pat. Cas. 446; Hawes v. Antisdel, 2 Bann. & Ard. 10; Patterson v. Duff, 20 Fed. 641; Wood v. Cleveland R. M. Co., 4 Fish. Pat. Cas. 560;

Parham v. American B. O. & S. Mach. Co., 4 Fish. Pat. Cas. 482;

United States Stamping Co. v. Jewett, 18 Blatchf. 469; 7 Fed. 869;

Clark Thread Co. v. Willimantic Co., 140 U. S. 488 (35: 521).

THE "WANT" EXISTING BEFORE THE ADVENT OF GILCHRIST.

In order to arrive at any just estimate of the Gilchrist patent, it is first necessary to understand the environment in which the invention is used and the practical conditions and want that brought it into being.

Scarcely any subject is more prosaic or of more ancient ancestry than that of the pulley. On the other hand, scarcely any subject of modern commercial life is more endowed with thrills than is the particular logging systems with which the Gilchrist patented pulley is so intimately associated. The history of the Gilchrist pulley block constitutes an important chapter in logging, as those operations are carried on in the forests of the Northwest.

The story of the development of logging is best told in the words of the witnesses themselves. Thus Mr. William Tyler (R. 150 et seq.):

"When I started logging, horses and oxen were used and logging with steam donkeys came in about 1902 or 1903; the first logging blocks used were pieces of scrap iron made in camp, the system being to oil them with the squirt can; and you had to oil them every time you made a pull on them, and if you didn't, you wouldn't have any block; if the camp was any size it took a man steady to oil the blocks; the first blocks had no extra width in bearing.

"The next improvement of blocks came about 1904 or 1905, when the compound or grease cup block was introduced; this was a block put out by the Bouse people, with a plug in the end of the pin; you could put a little compound in there and screw down the plug; then a little later another kind of a block came out with a cup which you screwed down with a regular cap, not an elbow, they didn't use them things, just used a sleeve on it, put a sleeve on where they had that elbow; the compound was hard grease which was forced in with pressure; these compound blocks staved in general use until we got the Gilchrist block.

"The first Gilchrist block I used was in the spring of 1910; the high speed donkey engine came in along about 1905 or 1906; the grease cup block was not a satisfactory appliance to work with a high speed engine, because you couldn't have a man around all the blocks and keep the cups turned down to keep the blocks from burning up; you had to have something that would oil itself; you would have to send a man around to turn down the grease cups about four times a day, twice in the forenoon and twice in the afternoon; in a big camp that would keep 3 or 4 men busy. The line runs

through these blocks with a fast engine pretty close to a mile a minute; my actual experience with a grease cup block shows that they would not stand up under this high speed work; we were worrying along with a grease cup block before we got the Gilchrist block; prior to the use of the Gilchrist block I had never seen a self-oiling block of that type and had never heard of it; if I had I would have bought one.

"The Gilchrist block has been a perfect success."

Continuing he says (R. 153):

"I have been around other camps and the Gilchrist type of self-oiling block is being used everywhere that they can get hold of them; I would not buy any other kind of blocks and have all that type of blocks in my camps; I am using the self-oiling style of block rather than the old grease cup block, because the grease cup block costs a man too much money; he would be buying repairs all the time; they are no good after you get them." (italics ours.)

THE HIGH-LEAD SYSTEM.

Referring to the high line lead he says (R. 155):

"I am familiar with high-lead logging; in ground logging the logs are dragged right on the ground; in the high-lead work one of these big blocks is hung up in the top of a tree, as high as 200 feet, and the main line is run through this block; then they hook onto the logs and the main line brings the logs in towards the spar tree, leading the nose of the log off the ground, the closer to the gin pole or spar tree the higher the nose of the log; that is what is meant by high-lead work,—the leading of the nose of the log high off the ground. * * *

"The high-lead block is up in the air from 140 to 200 feet, and the men who climb up the trees to adjust these blocks are specialty men whom we have to pay large wages to; it is dangerous work, with lots of chances; the ordinary logger doesn't do that work at all, and the men have particular equipment, like the men who climb a telephone pole, to do the climbing. If you were using the grease cup block with the present speed of lines, you would have to send a man up to look after the block 5 or 6 times a day, and even then it would not work successfully; in my experience with grease cup blocks we burn them out, no matter what care or attention we might give them; but we don't burn out these self-lubricating blocks.

"Q. Now, tell the Court just whether or not this high-lead system of logging is an advance in the logging business, a step in progress?

- "'A. Yes, it is, for this reason, that you can take the same crew of men with high-lead, and you can put out at least a half more logs to a high-lead than you could on the ground in the same locality. It is a big advancement for that reason.
- "Q. Is it a step that has come to stay in the art?"
- "A. I think it has, and all loggers that have made a success in the business says it has."

Your Honors in Los Alamitos Sugar Co. v. Carroll, 173 Fed. 280, in sustaining a patent for such a humble apparatus as a dumping wagon, where all of the elements were old, but where the united result was, as in the present case, exceedingly beneficial, quoted thus from Loom Company v. Higgins, 105 U. S. 580:

"It may be laid down as a general rule, though perhaps not an invariable one, that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention. It was certainly a new and useful result to make a loom produce 50 yards a day when it never before had produced more than 40; and we think that the combination of elements by which this was effected, even if those elements were separately known before, was invention sufficient to form the basis of a patent."

DISADVANTAGES OF THE PRIOR ART.

Referring to the old type of grease cup blocks Mr. Tyler says (R. 157):

"When these grease cup blocks would burn up we had to get another bushing and put in the sheave and fix the block up to go to work again, and while this was being done operations would be held up so that the men working on the line would be idle; if you had 15 or 18 men around there they would be idle until you got to going again; the self-oiling block does away with this suspension of operations."

Referring to the hard usage that the high line lead gives to a block Mr. Tyler further says (R. 161-162):

"The high-lead blocks hang in the trees, and when the line is tense would swing out from the trees, and when slackened up would slam up against the tree again; the blocks are swung so you can take them out of the tree and use either side; they are hung as close to the tree as they can be hung by a strap; some blocks have swivels; most of them are not placed with swivels; the same side of the block would not bang against the tree if you turn it around, but the same side would bang as long as you could keep it that way; if the oil cup were on the outside of the block it would not hit against the tree, but the jar would knock it off; the reason we took off the elbows and put on the straight sleeve was so we could screw the plug up better; the sleeve had about the same capacity as the elbow and projected out about the same."

A "setting" or "set" is described by Mr. Tyler (R. 164):

* * * "by a 'set' in the woods we mean where we rig up a tree and yard all around it just as far as we can reach with our lines, that is one 'setting' in the woods; when this block is filled and hung up in the tree as a rule it will operate without oiling for that setting so that as a general rule you only have to oil or fill it when you have it on the ground and put it up."

In regard to difficulties and hazards of lubricating blocks used with a high lead the witness Tyler says:

"If you have to go up in a tree to oil a block, it would take a man probably about half an hour, to pull him up there and put the oil in and take him down; while this oiling was going on that part of the outfit would have to be closed down; we usually have one man in the camp who is called a high-lead man for that kind of work and we pay him extra; the work of oiling the high-lead blocks isn't a job for everybody to do; only now and then you get a man to do this kind of work; they require large wages.

"The type of self-oiling blocks has practically displaced all other types of blocks entirely, will in time; a good many outfits have discarded the other blocks altogether." (Italics ours.)

MALLORY AND GILCHRIST BLOCKS INTERCHANGEABLE.

It is interesting to note that this witness makes no distinction between the defendant-appellee's device and plaintiff-appellant's device, as far as their construction and general utility are concerned. Thus he says (R. 152-153):

"Have used the Mallory self-oiling blocks interchangeably with the Gilchrist block, and I see no difference in the operation; the features of the self-oiling block which appeal to me are the strength of the material of the blocks, the building of the block, the mechanical work that is done on it, the guard which keeps our lines from cutting out the gooseneck, the self-oiling apparatus which makes it a cheaper block to operate, the better success with the sheave, it is self-oiling and it don't cut out, you don't have to buy bushings every two or three days to fix it up, it is always in condition; the extra width of bearing is of value because it gives the block more strength and renders it less liable to burn when under heavy duty; the recesses of the sides and the hubs of the sheave projecting into the recesses in the Gilchrist and Mallory blocks are of benefit for the simple reason it not only protects the block from dirt and dust, keeps it out of the bearings, but it gives a longer bearing on the pin without putting extra weight into the block."

And again (R. 164):

"The Gilchrist or Mallory self-oiling block will hang in a tree in operation without oiling for a length of time depending upon the work which it is doing; if it is working hard, it will hang at least two weeks, and if not working hard it will hang longer."

Mr. W. S. Cram, another witness, is a practical logger and manufacturer and is president of the Sunset Timber Company. His concern was, at the time of the trial, logging about seven or eight million feet a month. He told of his experience in the past 20 years leading up to the advent of the Gilchrist block. Thus at R. 172 he says:

"Have been interested in the logging business since 1902; am more or less familiar with logging blocks, using them in our camps since I have been engaged in the business; we first used a block with just two sides and a sheave which had to be oiled with an oil can; used that for about five years, I think; then later some one invented or brought into use what is known as the grease cup block and that was used for five or six years, and then self-oiling blocks of the Gilchrist type came into use; the first I ever heard of the self-oiling type of block was the Gilchrist block about five or six years ago; in the history of logging engines, when they first started, they used small engines and had much easier work; as logging progressed, the logging machinery was enlarged and improved and a great deal of trouble was experienced with the oiling of blocks; there was a good deal of time lost with the blocks heating and having to put in new pins and new sheaves, etc.; I think it was five or six years after the grease cup block came in until the self-oiling block came; during

that time of course progress was made in the size of the engines and the speed and everything else; the speed of the engines and machinery expedited logging so that we produced more logs."

HIGH LEAD SYSTEM PRACTICAL ONLY WITH THE PATENTED BLOCK OR DEFENDANT'S BLOCK.

Referring to the high lead he says (R. 173):

"Am familiar with the high-lead and sky-line system of logging, which we used to some extent in our operations; I regard the high-lead and sky-line systems as a step in the advance progress of the business of logging; it is becoming more popular all the time. With the highlead system of logging it would be possible to use the old grease cup system, but not practicable; it would be very cumbersome and we would lose a great deal of time with it because we would have more or less heating of blocks and pins; the blocks on the high-line are not accessible, so that the trouble can be corrected; they are usually up out of the way where it is quite a trouble to reach them; the self-oiling blocks have displaced the grease cup blocks with the big companies to quite a large extent, particularly on the high-lead work and in important places or hard places; they are using the selfoiling block quite generally, I think; we are using quite a few of the self-oiling blocks and in the buying of new blocks today we are buying self-oiling blocks; I don't think we are buying any other type of block; am familiar with the logging industry to quite an extent in the State of Washington; it is my understanding that the self-oiling blocks are used quite generally in the logging industry." (Italics ours.)

His first acquaintance with self-oiling blocks was in 1909 (R. 178):

"I first heard of the self-oiling blocks in 1909, and I called on Mr. Gilchrist in South Bend and he showed me what he was doing with it; that was the first I ever heard of the self-oiling patent block, in fact, it was the first case steel side block I ever remember seeing."

He states that the old method of oiling with the grease cup "was not considered practical" (R. 179).

Mr. James Brazel, another practical logger with thirty years experience, testified to early practical conditions as follows (R. 185):

"I started in the logging game with a job of greasing the skids and blocks and worked at all the different kinds of jobs in the logging camps up to superintendent of a camp and have owned a part interest in different camps; have been foreman and superintendent of camps in an executive capacity, for the last 15 years, and during that time have logged fifteen to twenty million feet per year.

"The first logging blocks we had were constructed of boiler plate made in the camp by the blacksmith, consisting of two shells with straps on the sides forming the ears, a cross head, pin and sheave, oiled with a squirt can through a hole drilled angularly through the straps to the pin; in 1902 or 1903 the Bouse block came into use, which consisted of two sides and a pin, with the pin drilled lengthwise and a plug in which we used compound; the compound or grease was forced in by screwing down a plug under the same principle of pressure found in grease cups on a modern automobile; the grease cup block was attended by men who looked after them in the woods, who were supposed to go around and screw the plugs down every so often, according to the amount of work they were doing; if the blocks were under heavy pressure, the plugs were screwed down a good deal oftener than on a light draft; sometimes the men would forget to screw down the plugs and we burned up the blocks; we had more or less trouble with all that kind of grease cup blocks; when the block stopped we generally took it down and got another block to hang in its place until we got it fixed; until the block was replaced the crew that was working around the engine was practically doing nothing."

The Bouse block referred to by the witness is one of the "prior use" defenses relied on by defendant-appellee and is also shown in Bouse Patent "Defendant's Exhibit T-T" (R. 57-61, Vol. II).

Referring to the patented Gilchrist block in issue witness continues (R. 186):

"I first heard of the self-oiling block in about 1909; Mr. Gilchrist showed me a model of his self-oiling block; I couldn't say exactly the time, but I distinctly remember in 1911, after he got his blocks out, that I bought some of his blocks; it was before he got his patent out, I think about the Fourth of July in 1909 that I saw his model and we were talking about it; we are now using the self-oiling type of blocks of the Gilchrist type and do not use any other; a man couldn't sell me any other type of block now; the other type of block has gone out of date."

SIX WEEKS WITHOUT REPLENISHING OIL.

Continuing this witness says:

* * * "the advantage of the self-oiling block over the grease cup or former types of block is, that when we move a setting we fill the block and

don't bother again until we take it down; it is in there for that setting; the Gilchrist blocks will hold oil for a long time in operation; the first block I put up was a Gilchrist block and we hauled somewhere in the neighborhood of about fifteen hundred thousand feet of logs through that block and it was up for six weeks; in taking it down we took it apart to see how much oil there was in it and it was about onethird full; during that six weeks the block was in continuous work every day; I figure that the self-oiling blocks hold sufficient oil for any one setting and I never figure on oiling the blocks on one setting; of course, it might be possible, a man would have to oil the blocks more than once in a setting if he had a great amount of timber, but I never had that much timber." (Italics ours.)

HIGH SPEED CONDITIONS.

On this subject Mr. Brazel says (R. 192-193):

"I judge that the haul-back line could be put back in the woods at the rate of a mile a minute if a man wanted to run the engine that fast; the main line that hauls the load could probably haul logs at a thousand feet in a minute and a half, if they didn't hang up; that would be about as high speed as practical.

"I don't know who pioneered the sky-line mode of logging in the Pacific Northwest; it came about gradually; we first started in to use it by moving the donkeys up on a hill, yarding up hill instead of down hill; I remember seeing the models and cuts of the sky-line system in a catalogue; the idea was carried from one man to another; I changed from the old style to the sky-line and high-lead system and didn't consult with anybody particularly; knew that the thing was in operation and went to the

Mason County Logging Company in the Black Hills to see it in operation; had seen illustrations in catalogues, but can't say whether I got my idea from that or somebody else told me about it; I had heard about this high-lead system and how it worked, talked to people that had been actually engaged in it. to the introduction of the high-lead system we used blocks weighing from 30 to 1000 pounds; the thousand pound block was the Tommy Moore: we would hang these big blocks up about 30 or 40 feet, long before the high-lead system was introduced, never used any of the large type of self-oiling blocks before putting in the high-lead system; when I changed to the high-lead system of logging, I changed to the self-oiling style of block; prior to that time I was using the old style of blocks as yarding blocks and haul-back blocks. The high-lead system had been used more or less for years before I adopted it; I have a man in my camp to look after the high-lead blocks when I can keep him; but they are not always available, sometimes I borrowed a man; it cost me \$50 to get the man to go up and change one block; we don't inspect these blocks every few days, we never inspect the self-oiling blocks unless we want to change them; it has been my experience that the selfoiling blocks have run under continual work for six weeks without oiling."

In contrast with this testimonial to the Gilchrist invention and as showing the previous existing *want* for it, the witness says (R. 188):

"We always had more or loss trouble with the oiling systems of blocks until we got the self-oiling blocks; before the self-oiling block came there was always a demand for a better system of oiling and a great many men studied on it and got out different rigs, but the compound system seemed, for five or six years, to be the only system we could get that would come anywhere near giving us any satisfaction at all.

"Have used the Mallory type of self-oiling block and it is the same block as the Gilchrist block, so far as I could see, outside of a few minor changes." (Italics ours.)

Mr. H. J. Owens, a logger of 22 years' experience, testifies to his first experience with horses and then the adoption of the donkey engine, and continuing says (R. 193-194):

"* * * have been manager of logging camps for the last 20 years; logged for myself a long time as an independent logger, then went with the Owen Logging Company, which is putting out about two million feet of logs per month; have been manager of that company for the past 16 years.

"In 1904 we used the Gilchrist logging block (Gilchrist 1904 patent not in suit), which was then oiled with an oil can through a little hole drilled in the side of the shells intersecting with the pin; the last block we used was the grease cup block made by Mr. Gilchrist, and the next type we used was the Gilchrist self-oiling block, which I first bought in March, 1910; he gave me a block at that time to try out; he had then made application for his patent; since 1910 I have used the Gilchrist self-oiling blocks; I think we have a Bouse block in the camp and one Mallory self-oiling block of the same type as the Gilchrist block; we use nothing else but self-oiling blocks in our camp now; I know from talking with other loggers in Washington that they are all adopting self-oiling blocks; the outstanding features of the Gilchrist type of block are the long bearing pin or hub, the self-oiling device and the hinged top; the long bearing gives less pressure on the pin and the brass bushings by distributing the pressure over greater area." (italics ours.)

This witness on cross-examination illustrates the old saying that "necessity is the mother of invention" where he says (R. 194-195):

"There is always a demand for something better if we can get it, and progress is being made in all methods of work—of logging and in equipment of all kinds; a large portion of this advancement is due to the requests of the loggers in the woods; improvements in logging devices, I believe, have come as a result of the requests of the loggers."

To the same effect of the "want" and of its "fulfillment" is the testimony of Ralph V. Pierce, who, now 60 years of age, has followed the logging business all his life, from working for wages in camp to running and owning them. He says (R. 200):

* * * ''the first I ever heard of the selfoiling type of block was in 1912, which was the
Gilchrist block, and from that time to this, all
the blocks which I have used have been the selfoiling Gilchrist type; I would buy no other type
of block because the other blocks give too much
trouble and you don't have to watch the selfoiling blocks so much; my experience has been
that you can leave the self-oiling blocks and
know that they will be running without depending upon some human agency to oil them or
turn down the grease cups; the first self-oiling
block I bought was a trip-line block and my instructions were to hang it up and let it alone
for three weeks; I did so and after continuous

operations for three weeks I examined it and it had oil in it; have done high-lead work and owned three high lead blocks; in my judgment the high-lead system of logging has come to stay; I wouldn't think of logging at all any more in the old style way on the ground; not only in rough ground, but in soft ground, the high-lead and sky-line systems of logging are particularly adapted." (Italics ours.)

ALL ADMIT THE GILCHRIST PATENTED BLOCK HAS SUP-PLANTED THE PRIOR ART BLOCK SIMPLY BY REASON OF INTRINSIC MERIT.

Mr. B. A. Wheaton, another practical logger and operator, in referring to the patented self-oiling blocks having displaced the other types of blocks, says (R. 202-203):

"the grease cup type of block is not very successful; the grease cup elbows are hard to keep on, as rough as you use moving blocks; when setting the rigging to move a donkey, you have to have some way to get your moving block out. and you generally take it out with a haul-back block so that the moving block is packed through the snow, mud, brush, or whatever happens to be in the way, without reference to what shape it is in have used the self-oiling block in suit, and it is a far superior block to the grease cup block in that it takes less attention, is more efficient and stays lubricated better; any block with a recessed hub stays clean on the bearing better than a straight sheave block and the more dirt you keep out of the bearing the less wear on the pin.

"Am familiar with the logging equipment used in the western part of Lewis County,

Washington, and Pacific County and part of Grays Harbor County, where I worked moving donkeys and in these camps it is the fact that the self-oiling type of block is almost universally displacing the old grease cup type of block; there are some grease cup blocks, but the new blocks are all self-oiling blocks." (Italics ours.)

With the history of the Gilchrist invention in mind and the manifest "want" that it filled, the rule asserted by this Court in Morton v. Llewellyn, 164 Fed. 693, 697 is particularly apt. In that case the Court said:

"Apart from the presumption of novelty that always attends the grant of a patent, the law is that where it is shown that a patented device has gone into general use, and has superseded prior devices having the same purpose, it is sufficient evidence of invention in a doubtful case. The Barbed Wire Patent, 143 U. S. 275, 292, 12 Sup. Ct. 443, 36 L. Ed. 154; Keystone Manufacturing Company v. Adams, 151 U. S. 139, 143, 14 Sup. Ct. 295, 38 L. Ed. 103; Irwin v. Hasselman, 97 Fed. 964, 38 C. C. A. 587; Wilkins Shoe Button Co v. Webb (C. C.) 89 Fed. 982; National Hollow B. B. Co. v. Interchangeable B. B. Co., 106 Fed. 893, 707, 45 C. C. A. 544."

Under this rule of law, which is the governing law of this Circuit, if the Court finds that invention is doubtful, then the admitted commercial success of the device is "sufficient evidence of invention".

While we insist that the evidence herein, disclosing the problems which Gilchrist met and overcame in his production of a practical block side, shows invention, yet even the defendant must admit that they have at best presented only a "doubtful case".

The Supreme Court again in Keystone Mfg. Co. v. Adams, 151 U. S. 139, 144, said:

"But when, in a class of machines so widely used as those in question, it is made to appear that at last, after repeated and futile attempts, a machine has been contrived which accomplishes the result desired, and when the Patent Office has granted a patent to the successful inventor, the court should not be ready to adopt a narrow or astute construction, fatal to the grant."

The Court of Appeals for the Second Circuit, in Rajah Auto Supply Co. v. Emil Grossman Co., 188 Fed. 74, said:

"The invention is, of course, a narrow one, but it belongs to that large class where the Courts have sustained improvements over the prior art, which produce a new and beneficial result that materially advances the art to which they belong. When a defendant persists in using such an improvement in preference to prior devices which he insists are equally efficacious, he tacitly concedes its superiority. It is difficult to reconcile his persistent use, even though it involves him in an infringment suit, with the contention that other devices which he is free to use, are equally good."

DEFENDANT ADMITS SUPERIORITY OF PATENTED BLOCK.

We have the testimony of Mr. Mallory, president of the defendant-appellee corporation, paying

the tribute of high praise to the patented blocks in suit. Thus on cross-examination (R. 235-237):

"Q. Now, with reference to the utility of this reservoir type of block, you are willing to admit that that type of block is a commercial success?

"A. Yes.

"Q. And you are willing to admit that for high-lead purposes the oil-reservoir block has displaced the grease-cup block?

"A. Oil-reservoir block has been displaced is more practical for high-lead purposes than

the grease-cup block or oil-cup block.

"Q. And for high-lead purposes you are willing to admit, has displaced the grease-cup block?

A. But could be made with either forged or

cast steel sides shown here.

"Q. Answer the question. You are willing to admit the type of block, with reservoir in the side here, has displaced the grease cup block and other types of block, with reference to the piling function, for high-lead work?

"A. We never used the blocks for high

lead----

"Q. Answer the question, yes or no.

"A. Couldn't be any displacement because not used before.

"Q. Then there isn't any other type of block

used for high-lead work?

"A. No.

"Q. Except—

"A. The oil reservoir block.

"Q. (continued)—The oil reservoir block?

"A. Correct.

"Q. And you are also willing to admit that the high-lead system of logging is an advanced step in the logging industry?

"A. Yes, sir.

"Q. And that it has come to stay?

"A. Yes, sir.

"Q. And makes logging more economical?

"A. Yes, sir. * * *

"Q. And no other form of block is used in that system of logging except the type of block in suit here?

"A. With oil reservoir side."

COURT AND COUNSEL CONCUR.

In all of this counsel for defendant-appellee concurs (R. 238):

"Mr. McCarthy. We are willing to admit the commercial success,"

and the Court so finds. The Court is also impressed with this testimony (R. 238):

"The Court. I don't understand there is any question about the utility. Used substantially exclusively for high-lead work."

The Court so finds in its opinion (R. 26) where it says in finding adverse to the patent:

"In reaching this conclusion, I am not unmindful of the presumption of the validity of the patent arising from its issue, or that the auto-lubricating block manufactured by plaintiff has proven its superior utility in the logging business."

With this mass of "fact testimony" and with the witnesses, counsel and the Court recognizing the existence of a "want" and its final "fulfillment" by the patented product of plaintiff-appellant, its unblushing appropriation by defendant-appellee calls for a close inquiry into the reasons for the lower Court's adverse findings.

This brings us to a consideration of the defenses and the so-called prior art.

PRIOR ART.

Some of the patents relied on by the defendant extend back as far as 1852, so it may be said that the 34 or 35 patents offered by way of anticipation partially disclose some 70 years of development in the art involved herein, and yet when the defendant came to build his construction he followed the patentee, Gilchrist, rather than the prior art.

Although this invention is a very simple one nevertheless the defendant has introduced in evidence thirty-four patents, including three British patents, to show that there was no invention involved in the Gilchrist patents in suit. For good measure there are added twenty-three publications, mostly advertisements in the "Timberman" a lumbermen's journal published in Portland, Oregon, illustrating in most general fashion various types of blocks offered on the market between the years 1906 and 1912. Then, of course, there is much oral testimony as to the physical structures referred to in these advertisements, but this Court has frequently expressed itself on the fallibility of oral testimony and human memory when it comes to anticipating a meritorious patent.

As said by your Honors in Diamond Patent Co. v. S. E. Carr Co., 217 Fed. 400 (C. C. A. 9th Cir.):

"Not only is the burden of proof to make good this defense upon the party setting it up, but it has been held that 'every reasonable doubt should be resolved against him'. And in Tilghman v. Proctor, 102 U. S. 707, 26 L. Ed. 279, it was held that the prior use must be something more than an incidental or casual one. Gayler v. Wilder, 10 How. 477, 13 L. Ed. 504, it was held that the prior use must be so far understood and practiced or persisted in as to become an established fact, accessible to the public and contributing definitely to the sum of knowledge. Cases applying these rules are Acme Flexible Clasp Co. v. Cary Mfg. Co. (C. C.), 96 Fed. 344, Anthracite Separator Co. v. Pollock (C. C.), 175 Fed. 108, Ramsay v. Lynn (C. C.), 187 Fed. 218, and Ajax Metal Co. v. Brady Brass Co. (C. C.), 155 Fed. 409. Under the rule established by these decisions we are required to view with caution and careful scrutiny evidence which is introduced to show a prior use that destroys the pecuniary value of a patent, which has met with commercial success and has been of value to the community."

In speaking of the evidence required to sustain this defense the Circuit Court of Appeals for the Eighth Circuit in Mast, Foos & Co. v. Dempster Mill Mfg. Co., 82 Fed. 332, says:

"It is always open to suspicion. It ought to be sufficient to establish such a use beyond a reasonable doubt."

ADVERTISEMENTS.

It is manifest that there is nothing in the written description of any of the old advertisements relied on by defendant even remotely suggesting the Gilchrist or the defendant's construction, and, of course, a mere illustration in an advertisement that does not at least illustrate the invention, is wholly incompetent.

"Any printing, writing, or illustration relied upon as part of the prior art must be such as to make disclosure, not to an inventor, but to the ordinary individual, skilled as a workman in the field involved. The documents relied upon must teach the art; must be such that the world has knowledge of the art; must be such that qualified persons, without the exercise of inventive genius, may produce the device from the disclosures."

Vacuum Cleaner Co. v. Thompson Mfg. Co., 258 Fed. 239, at p. 240;

U. S. Metallic Packing Co. v. Hewitt Co., 236 Fed. 739, at p. 743.

See, also:

Automatic Weighing Mach. Co. v. Pneumatic Scale Corp., 166 Fed. 288.

As your Honors said in Diamond Patent Co. v. S. E. Carr Co., 217 Fed. 400, 402 (quoting Coffin v. Ogden, 18 Wall. 120; 21 L. Ed. 821):

"The invention or discovery, relied upon as a defense, must have been complete, and capable of producing the results sought to be accomplished, and this must be shown by the defendant. The burden of proof rests upon him, and every reasonable doubt should be resolved against him."

See, also, Topliff v. Topliff, 145 U.S. 156.

In American G. Co. v. Leads (C. C.), 87 Fed. 873, 876, Judge Shipman said in substance that:

"A Court is not called upon to struggle to decipher an anticipation in the unfinished work and surmises of earlier students on the same subject, and I am of the opinion that a court is not justified in finding anticipation in an old and discarded device, the meaning of which is obscure and puzzles experts."

The premise on which His Honor Judge Bean based his opinion of lack of invention, or lack of patentable combination, in the Gilchrist combination finds expression in the opinion as follows (R. 24):

"Under the proof the ultimate question for determination as far as complainant's patent 977,613 is concerned is whether the element of a pulley side cast in one piece and provided with an interior oil chamber is sufficient, in view of the prior art, to constitute invention and give validity to the patent. All other elements of the claims in question are old in the art, and in the Gilchrist pulley they do not perform any new function or have any new mode of operation, or produce any new result, and therefore the combination of them in one device is not invention."

We have already referred to your Honor's decision in Willard v. Union Tool Co. on the alleged defense of aggregation.

DISTINCTION BETWEEN CLAIMS FOR A "MANUFACTURE" OR "COMPOSITION OF MATTER" AND FOR A "MACHINE".

The fault with the learned Judge's assumption is his failure to appreciate the rule of law underlying a "combination claim". Of course, the claims in issue are combination claims. If the Court was right in its view that you could only support a patentable combination by showing that there must be at least one entirely new element added to the combination, it would practically destroy a great majority of meritorious combination patents which in the past have been upheld by the Courts as valid. If you had to have some one entirely new element in a combination in order to give validity to the combination, the patent would really be a patent on this element alone and would destroy the distinction new existing between a "machine" and a "composition of matter".

When we say the Gilchrist claims are "combination" claims we really mean they are claims for a *machine*, for obviously machines, as we understand them, are necessarily made up of a combination of a number of co-acting parts.

It was to offset such error as his Honor Judge Bean early fell into in connection with this case, that is believing that if the element of an "oil chamber" in connection with the block sides was old and all the other elements of the pulley being old, therefore, the patent was void, that led the Courts early to announce the true theory of combination claims to be: that in a combination claim it is presumed that all of the elements are old and that the novelty, if any, resides in the combination and the co-action of the various elements to produce a new or improved result. Once this elemental rule is appreciated that in a combination claim it is presumed

that all the elements are old, we are in a fair way able to grasp the *combinative idea* of the invention and to measure the results of the combination by what the *entire combination* produces over what anything else in the prior art produced, and not try to examine the invention microscopically. In other words, one must first have the proper perspective of the invention measured by the pre-existing *want* and the *degree of accomplishment*.

COMBINATION PATENTS.

It is an elementary rule that in combination claims the invention, if any, lies in the combination, and not in the novelty of any individual element.

> Imhaeuser v. Buerk, 101 U. S. 660; Griswold v. Harker, 62 Fed. 389.

To the same effect is the case of Gormully & J. Mfg. Co. v. Stanley Cycle Mfg. Co. et al., 90 Fed. 279, 280:

"Of course the claim can not be defeated by showing that each of its elements, separately considered, was old. The defendants must prove that the combination was old. If they fail in this, they fail irretrievably."

One of the best expressions of the Supreme Court on the subject of combination patents is found in Leeds & Catlin Co. v. Victor Talking Machine Co., 213 U. S. 301, 53 L. Ed. 805, where it is said:

"A combination is a composition of elements, some of which may be old and others new, or all

old or all new. It is, however, the combination that is the invention, and is as much a unit in contemplation of law as a single or noncomposite instrument. Whoever uses it without permission is an infringer of it."

As said by the Circuit Court of Appeals for the Sixth District, in Yesbera v. Hardesty Co., 166 Fed. 120, 125:

"The point to be emphasized is that the law looks not at the elements or factors of an invented combination as a subject for a patent, but only to the combination itself as a unit, distinct from its parts * * *"

This Court in Stebler v. Riverside Heights Orange Growers' Ass'n, 205 Fed. 735, at 738, said:

"True, we may pick out one similarity in one of these devices, and one in another, and still one in another, and, by combining them all, anticipate the inventive idea expressed in the Strain patent, but the combination constituting the invention is not found in any one of them."

As said by Judge Coxe in Johnson v. Forty-second Street, M. & St. N. Ave. R. Co., 33 Fed. 499, 501:

"Of course, the accusation that the separate elements of the combination were old is of no moment. It would be as irrational to charge an author who has produced a sentence of surpassing power and beauty with plagiarism, because the words which he employs have long been found in the lexicon, as to overthrow a patent for a new and useful combination upon the ground that its separate elements are old."

The British rule is similar, as seen by the decision of the Court of Appeals in the case of Minerals Separation, Limited, v. The British Ore Concentration Syndicate, Limited, et al.:

"The industrial and scientific problems which face mankind are being attacked all over the world by busy, inventive minds from the most varied points of view. When some lucky inventor has been successful in solving the problem and (whether for the purpose of action or otherwise) the records of past failures or incomplete success are searched, it is common to find that suggestions or adumbrations of each of the various steps by which he has achieved his result are to be found in some one or other of the works of those who have gone before him, and when such records are selected from a mass of antecedent publications and put in an isolated form before a court, there is a danger of their giving rise to a suspicion of a general lack of novelty in the successful invention. But it must be remembered that these alleged prior publications are the product of a selection made with a knowledge of the successful invention, and that probably hundreds of proposals equally promising, but which point in wholly different directions, have been rejected in the search by reason that they do so. It is somewhat as though one were to decry the merit of a prospector who had discovered that sands were auriferous, by showing that after due rejection of most of the non-metallic particles from a handful of sand, the gold may be made to appear visible to the naked eve."

PATENTS TO MORGAN, LUDFORD AND LABADIE.

The Court in arriving at invalidity in Gilchrist apparently disregarded all of the thirty odd patents set up in the answer by defendant and offered in evidence, except the patents to Morgan, Ludford and Labadie.

It is further apparent that the lower Court rightly disregarded all testimony offered by defendant bearing on so-called "prior use", and based its opinion on the question of whether or not the prior art disclosed in three of the thirty-four patents mentioned deprived the plaintiff's patent of the quality of invention.

It ought not to take 34 patents to prove such a simple invention as the Gilchrist block admittedly is, invalid. The citation of such a large number of patents is a compliment to Mr. Gilchrist's genius, if genius you may call it.

As was said by the Circuit Court of Appeals for the First District in Forsyth v. Garlock, 142 Fed. 461, 463:

"The citation of a large number of patents as anticipation, tends to strengthen rather than weaken the patent sued upon, by showing that the trade had long and persistently been seeking in vain what the complainants finally ac-

complished.

"Forty-odd reference patents were not needed to prove that Dean was not a pioneer in the telephonic art, that he did not originate the granular-carbon type of transmitter, and that he was not the first to provide a means for preventing the packing of the granules * * *. The novelty of none of the claims is gainsaid by any single prior patent or structure; but collectively the references establish that all of the elements, broadly considered, which Dean used in making up his combination, were old and were com-

monly used in transmitter construction * * *, but the concept of such a unitary structure was not obviously taught nor foreshadowed by anything in the prior art."

International Tel. Co. v. Kellogg Switchboard Co., 171 Fed. 651 (C. C. A.).

BEST REFERENCE.

Defendant-appellee's expert who, aside from admitting (R. 123) that he has "had no practical experience with the use of logging blocks, except possibly a few times when I have been about logging camps; have never designed any logging blocks; have never taken out any patents nor made any drawings of logging blocks," nevertheless says "as a single patent the best reference meeting claim one is the Morgan British Patent No. 712-1893". Of course, the witness' reference to the claim was wholly improper, but he no doubt intends to consider the Morgan patent as the "one best reference". The Court seems to have accepted the dictum of Mr. Reynolds with regard to Morgan, in saying (R. 25):

* * * "Indeed, the Morgan patent reads substantially letter perfect with claim 1 of complainant's patent. It is true the oil reservoir in the Morgan pulley is formed by a plate revited on the side and not cast as an integral part of it as in complainant's device. It, however, is for the same purpose, operates and functions in the same way and produces the same result by retaining oil and lubricating the bearing pin as in complainant's patent, and it was not invention for complainant to make the side in

one piece, thus combining the separate parts of the Morgan patent since there is no substantial change in function, operation or result."

If the making of Gilchrist's oil chamber integral with his block sides, as distinguished from the riveted-on oil cup of Morgan, is to be made an issue in the case, still the present case goes much further in showing the inventive combination by Gilchrist over Morgan or anything else in the prior art, than was the case in Krementz v. Cottle, 148 U. S. 557; 37 L. Ed. 558 (known as the "Collar-Button Case"):

"It is not easy to draw a line that separates the ordinary skill of a mechanic, versed in his art, from the exercise of patentable invention, and the difficulty is specially great in the mechanic arts, where the successive steps in improvements are numerous, and where the changes and modifications are introduced by practical mechanics. In the present instance, however, we find a new and useful article, with obvious advantages over previous structures of the kind.

"The view of the Court below, that Krementz's step in the art was one obvious to any skilled mechanic, is negatived by the conduct of Cottle, the president of the defendant company. He was himself a patentee under letters granted April 16, 1878, for an improvement in the construction of collar and sleeve buttons, and put in evidence in this case. In his specification he speaks of the disadvantages of what he calls 'the common practice to make the head, back and post of collar and sleeve buttons separate, and to unite them by solder. His improvement was to form a button of two pieces, the post and base forming one piece, and then soldering to the post the head of the button as the other piece. Yet, skilled as he was, and with his at-

tention specially turned to the subject, he failed to see, what Krementz afterwards saw, that a button might be made of one continuous sheet of metal, wholly dispensing with solder, of an improved shape, of increased strength, and requiring less material.

"It was also made to appear that the advantages of the new button were at once recognized by the trade and by the public, and that very large quantities have been sold."

In the light of the testimony this Court would be justified in taking the Morgan patent alone "the one best reference" and disregard all the rest of the so-called "prior art". If Morgan does not anticipate, then none of the patents anticipate.

Waterbury v. Aston, 183 F. 120, (C. C. A. 2nd Cir.).

As said by your Honors in Los Alamitos Sugar Co. v. Carroll, *supra*:

"We do not think it necessary to refer specifically to the large number of patents set up as anticipatory. The one apparently most relied upon is that issued to Chisholm, which was for 'certain new and useful improvements in the mode of dumping railroad cars'."

In disposing of Chisholm and with it the rest of the patents, your Honors said:

"It is not sufficient to constitute anticipation that the devices relied upon might by a process of modification, reorganization or combination with each other be made to accomplish the function performed by the device of the patent sued on."

MORGAN BRITISH PATENT.

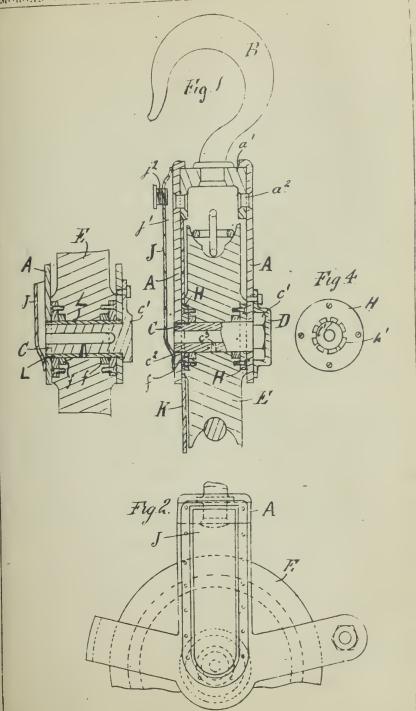
The Morgan British patent appears in the record (Vol. II. R. 154-157). It comprises two parallel side plates marked "A-A" in the drawing, in which a pin or bolt "C" is fixed forming an axle on which the pulley or sheave "E" turns. It is noted that this axial bolt "C" is cylindrical from end to end and that the check plates or sides "A-A" bear directly against the hub of the pulley. Thus it will be seen that any strains on the pulley tending at all to warp or twist the check plates or sides "A-A" would have the effect of binding the sheave or wheel "E" so that it would no longer function as a pulley.

On the outside of the pulley is an exposed oil cup consisting of a sheet metal plate "J" riveted on, as shown in Fig. 2, and from this oil cup "J" projects outwardly as a further obstruction a cap "j2", which closes a hole through which the oil cup may be filled.

The sole description in the patent of this oiling arrangement is the following, beginning line 22, page 2:

"A vertical space J1 extending from below the hollow of pin C to top of block on one side frame A is covered up with a plate J in such a manner as to form an oil cup for containing the lubricant for the pin C, and the said lubricant is charged through the opening J2 which has a removable cap or cover. A suitable hole C3 is formed through the hollow pin C to permit of the oil getting to the outer circumference of said pin C and so lubricating the bearing of the sheave E."





formula Printed by Hadris and South



This plate "J" of Morgan is just what the patentee says it is: An "oil cup".

The Morgan patent, like so many British patents cited in past cases considered by this Court, is suggestive of a "want" and prophetic of a possible means of fulfillment, but has fallen far short of fulfillment, Morgan differs from Gilchrist considerably more than in the one feature that the oil cup of Morgan is riveted on the outside and, therefore, likely to be knocked off, and at the same time weakening the structure; whilst in Gilchrist the walls of the oil reservoir are integral and, therefore, reinforcing the Gilchrist block.

As compared with Gilchrist (or Mallory)we find that Morgan *lacks*:

- (1) Annular recesses in the adjacent faces of the block sides;
- (2) A bearing pin with reduced ends fixed to the sides and shouldered, so that the shoulders engage the sides of the block to prevent the same from binding upon the sheave;
- (3) Hub bosses on the sheave fitting closely and antifrictionally in the recesses in the sides;
 - (4) A long bearing with dust-protecting means;
 - (5) Morgan is a narrow sheave block;
- (6) Morgan has no protection against dirt and dust;
- (7) The more one studies the working conditions under which Gilchrist (and Mallory) operates, a clearer appreciation is there had of the necessity of the Gilchrist-Mallory combination;

- (8) Neither has Morgan any means for readily opening up the sides to allow a cable to be looped over the pulley wheel as in Gilchrist or Mallory;
- (9) It is apparent from a mere reading of the Morgan patent that it is wholly unadapted for logging purposes, not by reason of its size, but by inherent defects in design and principle. This is abundantly testified to by the practical men who were called to express an opinion upon it.

It recalls the case of Cimotti v. American, 115 Fed. 498 (same case 198 U. S. 408):

"For nearly 20 years it remained nothing but an ambiguous description of incomprehensible drawings. It emerged from oblivion solely to meet the exigencies of this litigation. * * * The inquiry is pertinent, why was it that this machine was permitted to remain unused? Since the success of the Sutton apparatus (the device of the patent in suit) every effort has been made by infringers to evade it by introducing specious changes of form, and yet, if we are to accept the contention of the appellant, there is an operative machine in existence doing the work as well as the Sutton machine and free to anyone who desires to use it. * * * Is not the presumption almost conclusive that it was not used because it was not usable."

MORGAN UTTERLY IMPRACTICAL.

Thus on cross-examination, Patent Solicitor Reynolds, defendant's expert (R. 103) testified concerning Morgan:

"Q. Is that suitable to modern logging? Would that last in the woods today? A flimsy structure of that kind?

"A. I don't wish to try to qualify as an expert in logging matters and I think I had better not pass on that question."

Of course, such an answer is worse than an out and out admission of impracticability and this implied admission was only accentuated and made worse by the very next statement of the witness (R. 103):

"I can make a block of the type of the Morgan block which would be successful in the woods."

In other words, something was left for invention.

"The presumption of invention is not overcome by the fact that an expert is able to build up the patented device by selecting parts taken from the prior art."

Kryptok Co. v. Stead Lens Co., 207 Fed. 95.

"I cannot adopt the opinions of defendant's experts. And for a mechanic to say that he can base an opinion on the art as it existed when he was a boy, and not have that opinion affected by the art as it now exists, and which is far in advance of the old art, is to say that he has a mind capable of forgetting and ignoring all that is modern and really practical and must be impressed upon him, and only remembering that which is old and impracticable and of which he has no practical knowledge whatever."

Underwood Typewriter Co. v. Elliott-Fisher Co., 165 Fed. 927.

"The Zimmer publication must be given effect as an anticipation only to the extent that it actually gave to the public information of a process of filtration. It is not competent to

read into such a publication information which it does not give, or by expert opinion explain an otherwise uninforming statement by evidence of some apparatus or article not itself competent as an anticipation. Badische Aniin & Soda Fabrik v. Kalle & Co., 104 Fed. 802, 44. C. C. A. 201."

Loew Filter Co. et al. v. German-American Filter Co., 164 Fed. 855, 860, C. C. A. 6th Cir.

This is what practical men say of Morgan.

Mr. Wm. Tyler (R. 154-5):

"I never saw a block like the Morgan block shown as Defendant's Exhibit 'BB', and never heard of that kind of a rig; it is not practicable construction for a logging block, because it isn't built for a logging block to start with, the hook would break off the first time you started to use it and the pin is too small; the oiling device would be torn off the first time you tried to put it out in the woods; these big high-lead blocks weigh 1200 to 1400 pounds and we drag them around through the woods on the ground, over stumps and boulders, and all that sort of thing. A side riveted on a 1400-pound block would not hold tight very long; you would never get it hung anywhere, I think. these blocks are hung up high in the tree and there is a strain put on them, they swing away from the tree and when the strain lets up they jam back against the tree; when a 1400-pound block with a side riveted on, as in the Morgan block, is swung away from the tree, and swung back against the side, it would beat the oiling device right off, carry it right off there."

Mr. H. F. Weatherby (R. 183):

"Referring to the Morgan block, as shown by Defendant's Exhibit 'BB', I would say that the block was not practical in measurements and general design; logging blocks in the woods suffer hard service and a block of the Morgan type in the light of the present art as shown by the self-contained chamber, with a chamber that is stuck on the outside to receive knocks and blows, would be impractical in logging camps;

* * * "a practical oil chamber cannot be constructed on a block side without casting it integral with the side because there is no way of protecting it; no one has ever been able to fasten a reservoir upon the side so that it would be as secure as if cast in the side; I could not do it; whether a side made out of boiler plates with pieces properly secured with bolts or rivets would stand more blows than a casting, depends on the nature of the casting; that is a matter for a metallurgist; a casting properly annealed and heat treated will stand as much of a blow as wrought iron or steel." * * *

Mr. L. E. Younie, an engineer and designer of blocks, says (R. 210-211):

"the reservoir on the Morgan patent is simply an oil receptacle attached on the outside by means of rivets and it has the effect of weakening the block side to the extent of the amount of material drilled out of the block side to make place for the rivets, which is of considerable moment if you count the number of rivets that are supposed to be used in that side, it takes quite a bit of material away. Morgan block would not be a practical logging block because the abuse and rough usage to which it would be subjected, as all logging equipment is from time to time, would incapacitate it, make the oil receptacle leak and it would be of no use; it is not necessary to break the side before impairing the use of the chamber for if it were subjected to a blow sufficient to loosen up the rivets, or turn up the edge of the applied piece slightly, the oil would run out, and you wouldn't have an oil chamber; if there were leakage at the top, air pressure would be admitted, which would materially affect the rapidity with which the oil would flow out of it, which I consider of very great importance in an interior oil chamber."

Continuing Mr. Younie points out that the Morgan block would be much more expensive to manufacture than would a Gilchrist block (R. 211). Besides, as already seen, the Morgan block would be inferior.

Another thing that Mr. Younie pointed out, based on the experience of sixteen years as a designer of the pulley blocks for the Willamette Iron & Steel Works (R. 212-213):

"In the first place the width of the sheave is governed by diameter of the line which is supposed to be used on the sheave. In designing a block a matter of very first consideration is to keep the weight within certain limits; keep the weight as low as possible, and we have material enough to stand the strain, but keep the weight down. That is what we all try to do, because these blocks are manually handled over ground that is very difficult for a man to get over. They have to be carried up mountain sides, up hillsides, over logs, and through underbrush; through gulleys and ravines, where even a man's footing is sometimes—it is difficult for a man to get his footing; difficult for a man to get over; these blocks often have to be carried. So you can see that it is very important—it is important that we keep down the weight within certain bounds, making the sheave no wider at the rim than just necessary to accommodate certain size rope. You can readily see that the only means left for us to avail ourselves to get a long bearing is to put in the annular recess. We can't build a sheave with a rim four inches wide, because we want a bearing four inches wide. If we want to use a one-inch rope in that block, we would make the rim one and a half, or one and three-quarter inches. Then put in an annular recess. This gives a long bearing; we haven't the big mass of rim and the big mass of block."

The books are full of cases where slight changes in appearance of the patented article brought about radical changes in results. Invention is not to be slighted because the changes are slight.

In the case of United States Fastener Co. v. Bradley, 149 Fed. 222, the Court of Appeals for the Second Circuit said:

"This court has repeatedly upheld patents for similar improvements, the test being not the simplicity of the device, but the difficulties overcome and the results accomplished."

Indeed as your Honor said in Kitchen v. Levison, 188 Fed. 659:

"It is urged that the improvement which the appellee made on the prior art was simple and obvious. It may be conceded it was simple, but that fact alone does not deprive the invention of patentability. There may be the highest form of invention in some of the simplest improvements on the prior art."

THE RULE OF LAW ABOUT PRIOR PUBLICATIONS.

That the Morgan, Ludford, Labadie and other publications were known for many years without leading to the use of the Gilchrist patented block, where such a block was so much wanted that the public took it at once the instant Gilchrist offered them, is a proof from experience that the publications were not sufficient under the rule of law.

The Telephone Cases, 126 U.S. 1;

Seymour v. Osborne, 78 U. S. 11 Wall. 516 (20-33);

Cohn v. U. S. Corset Co., 93 U. S. 366 (23-907);

Cahill v. Brown, 15 Off. Gaz. 697;

Atlantic Giant Powder Co. v. Parker, 16 Off. Gaz. 495;

Hood v. Boston Car Spring Co., 21 Fed. 67;

Betts v. Menzies, 10 H. L. Cas. 154;

s. c., Goodeve's Pat. Cas. 51;

Neilson v. Betts, L. R. 5, H. L. 15;

s. c., Goodeve's Pat. Cas. 56.

Concerning the Morgan patent, the words of the Supreme Court in Carnegie Steel Company v. Cambria Iron Works, 185 U. S. 421, are apt:

"This defense presents the common instance of a patent which attracted no attention, and was commercially a failure, being set up as an anticipation of a subsequent patent, which has proved a success, because there appears to be in the mechanism described a possibility of its having been, with some alterations, adaptable to the process thereafter discovered." And on this subject of prior art no better expression of the rule is found than that laid down by Judge Toulmin in Western Electric Co. v. Home Tel. Co., 85 Fed. 649, 656:

"The force of this ruling, and the similar ruling in Clough v. Barker, 106 U. S. 175, 1 Sup. Ct. 188, is made manifest, in its practical application to the rights of parties, by the reflection that all earlier patents set up in defense against a later patent sued upon are but the record evidence of the status the art has reached. The rights under such later patent are subject to what this record evidence actually shows. To change this record, by permitting theoretical modifications of these earlier patents, would be the same, in principle, as to change, by interpolation or modification, any other evidence between the parties."

The defendant will no doubt contend, as indicated by the excerpt quoted above from the lower Court's opinion, that the interior oil chamber of Gilchrist resulted simply from casting in one piece the oil cup and the block side of the Morgan patent; but this is not true; there was much more which Gilchrist had to do than simply cast an oil cup on the outside of the block side. It was necessary for Gilchrist to design and model an altogether different block side from what the prior art had even suggested. To make the block a practical logging block, there must be no sutures for oil to seep through, and Gilchrist overcame this difficulty by making his block side integral and coring out the oil reservoir; the sides of the oil chamber must function as sides of the block

side to strengthen the block side; the oil chamber must be located so as to enclose or extend down over the end of the pin; the metal of the block side must be distributed so as not to increase the weight and still maintain the strength; the addition of the oil reservoir must be inexpensive; the block side must be so constructed as to stoutly and properly engage the pin; the hub bearings above all things must be made dust-proof; there must be a long bearing with dust-protecting means, that is, involve hub bosses and recessed sides. The sides must be supported against collapse. This meant reduced ends of the bearing with supporting shoulders to take the thrust. The oil feed must be regulated so as to slow as well as to be automatic.

Each of these problems was successfully solved by Gilchrist in his development of the block covered by the claims of his patent.

The Morgan patent lacking so many of the essential details of construction of Gilchrist, as well as of Mallory, shows most conclusively the meritorious character of Gilchrist. As said by the Supreme Court in the Barbed Wire Case, 143 U. S. 282:

"Under such circumstances courts have not been reluctant to sustain a patent to the man who has taken the final step which has turned a failure into success. In the law of patents it is the last step that wins."

As said by the Supreme Court in Diamond Rubber Co. v. Consolidated Rubber Co., 220 U. S. 435:

"Knowledge after the event is always easy and problems once solved present no difficulties, indeed may be represented as never having had any and expert witnesses may be brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But the law has other tests of the invention than subtle conjectures of what might have been seen and yet was not."

The Morgan patent, like so many British patents is at best prophetic but lacking in teaching practical accomplishment.

THE RULE REGARDING ANTICIPATION BY A FOREIGN PUBLICATION OR FOREIGN PATENTS IS STRICTER THAN IN THE CASE OF ALLEGED ANTICIPATING AMERICAN PATENTS AND IS MORE FAVORABLE TO A COMPLAINANT.

As was said in Hanifen v. Godlshalk Co., 84 Fed. 749:

"It is a well settled and familiar doctrine that an invention patented here is not to be defeated by a prior foreign patent unless its descriptions or drawings contain or exhibit a substantial representation of the patented invention in such full, clear and exact terms as to enable any person skilled in the art or science to which it appertains, without the necessity of making experiments to practice the invention."

Seymour v. Osborne, 11 Wall. 516; Cahill v. Brown, 3 Ban. & Ard. 580; Fed. Cas. 2291; Gaylor v. Wilder, 10 How. 477; Consolidated Car Heating Co. v. American Electric Corp., 82 Fed. 993, 997; same 25 Fed. 662.

The Circuit Court of Appeals of the Second Circuit, in Westinghouse Co. v. Great Northern Ry. Co., 88 Fed. 26, said:

"The prophetical suggestions in English patents of what can be done, when no one has ever tested by actual and hard experience and under the stress of competition the truth of these suggestions, or the practical difficulties in the way of their accomplishment, or even whether the suggestions are feasible, do not carry conviction of the truth of these frequent and vague statements, and are insufficient to render a patent void for want of invention."

THE LUDFORD PATENT.

The only other patent that needs to receive any special consideration is the patent to Ludford, No. 844,159, dated February 12th, 1907. This shows an interior oil reservoir, but it so lacks all the other elements and essentials of Gilchrist that it is at best an illustration of a patent showing one element of a combination but not showing the combination. Ludford is a sheave block of very simple construction, employing a narrow pulley devoid of hubs fixed to a small cylindrical axle which turns in a couple of adjustable bushings screwed into the sides of the block.

The fact that the block has an oil receptacle is its nearest approach to Gilchrist. Of course, through the skillfulness of Mr. Reynolds, the patent solicitor expert of defendant-appellee, he finds complete anticipation, but he finds that with practically each of the remaining thirty-four patents, although he admits (R. 104) on cross-examination that Ludford does not show an axial bore in the shaft nor a sheave rotating on a pin.

What has been said of Ludford or Morgan applies with equal or greater force to Labadie and each and all of the paper patents brought forward by the defendant.

MALLORY'S TESTIMONY SUPPORTS THE THEORY OF INVENTION.

In considering whether the invention is the result of invention or mechanical skill, the Court should try to put itself in the position whereby the patent in suit is excluded from consideration. It is easy enough, now that Gilchrist has perfected his pulley-block, for the defendant to say that it was obvious to any skilled mechanic that a combination of the successful elements of other blocks would result in a correspondingly successful new block, but the answer to the defendant is that for years the logging industry had been penalized in less efficiency and high costs, by reason of a lack of that which Gilchrist finally, after long years of experimenting,

provided, to wit, the self-oiling block, with its other essential features going into the patented combination. During all this time the industry and its mechanics, skilled in producing logging equipment, were seeking a solution of that problem. Mallory himself was seeking a solution of that problem, and his evidence on the stand discloses that he is a mechanic of no mean ability, but it did not occur to him, nor did it occur to any other one of the thousands of mechanics who were interested in logging equipment, that the combination of Gilchrist was a practical device until he saw the Gilchrist block in 1910-11 and then recognized its merit and sought an exclusive sales agency.

It has usually been accepted that the seat of inventive ideas is in the imagination. If invention springs from the imagination of one person, it is no less an invention if it springs from the imagination of another. We, however, find in the testimony that the defendant claims (R. 79) that the combination of his block arose from his "imagination", and if that were true and had he been the first one to produce the combination from his "imagination", he would have been entitled to a patent. Hence, the defendant is hardly in a position to say in one breath that the idea of the Gilchrist patented combination developed from his "imagination", and then, in the next breath, to say that such an idea could not have developed from Gilchrist's imagination.

That the Mallory block emanated from the imagination of Mr. Mallory is to be taken, of course, with a grain of salt (except as an admission of invention), because he already not only knew of the Gilchrist block, but he had been handling them and selling them. This "imagination" testimony, however, is an admission on Mr. Mallory's part that it would require the exercise of thought and study to work out his block and put in two oil reservoirs as against one by Gilchrist. If that was invention, how much more was Gilchrist entitled to invention over the prior art.

IMPROPER SO-CALLED "EXPERT" TESTIMONY OF DEFENDANT.

The usurpation of the functions of the Court by the defendant's expert, Reynolds, points to a possible source of error on the part of the trial Court. In any event the abuse of the privileges of an expert is called to the attention of this Court at this time with the object and hope that the Court may feel called upon to make an announcement as a future guide to practitioners in this circuit.

In the instant case the defendant's expert, Mr. Reynolds, viewing the patents academically as a patent solicitor and without any practical knowledge whatsoever, in the industry to which the invention pertains, took it upon himself to argue the patent claims from the stand and draw his own conclusions of what was invention and what was not invention.

Mr. Reynolds gives his occupation as "Patent Attorney and Patent Expert" (R. 101), but admits (R. 123) that he has had no practical experience with the use of logging blocks, had never designed any logging blocks and had never taken out any patents on logging blocks or made any drawings of logging blocks.

He said (R. 103) when asked why the structure of a prior patent most strongly relied on by defendant-appellee for anticipation was suitable for modern logging, answered:

"I don't wish to try to qualify as an expert in logging matters and I think I had better not pass on that question."

Nevertheless, Mr. Reynolds' testimony, which constitutes the bulk of the defense, proceeds in all confidence not only to find "mechanical equivalency" when, of course, he cannot possibly know what would be an equivalent in this particular instance, but proceeds to give his opinion on infringement and invention, and finally applies the claims of the patent to the so-called prior art, with the sole object and purpose of showing that there was no invention in the Gilchrist patent lacking, of course again, those very qualifications which would be a condition precedent to the establishment of a standard whereby one may say there is invention or there is no invention.

As was held in Hess-Bright Mfg. Co. et al. v. Standard Roller Bearing Co., 177 Fed. 435, citing

McMichael & Wildman Manufacturing Co. v. Ruth et al., 128 Fed. 706; 63 C. C. A. 304:

"The fact that an expert, with a patent before him, might be able to build up the structure covered thereby, by selecting and adapting appliances theretofore known, does not overcome the presumption of invention arising from the granting of the patent, where neither the same combination in its entirety nor the same mode of operation had previously been described or known."

THE INTERPRETATION OF A CLAIM IS A QUESTION OF LAW FOR THE COURT. WALKER, \$189.

Practically all of Reynolds' testimony is taken up in giving his views as to what claims 1, 4 and 5 of the 1910 Gilchrist patent mean. Glaring instances of this are seen on pages 101, 110, 115, 117, 123, 125, 138 and 139. Thus on Pages 101 and 102 Reynolds testifies:

"In comparing Morgan's patent with the terms of claim 1 of the Gilchrist patent 977,613 I find every element of the claim in the Morgan patent in a similar type of construction, working and functioning in a similar way to secure a similar if not identical result. In fact, the resemblance between the two is unusually near and apt.

"Q. Now, I will ask you, Mr. Reynolds, from your experience in the patent office, what you would say would have been done as to *claim* No. 1, had the Morgan patent been called to the attention of the patent office or the examiner?

"Mr. Cary. We have file wrapper showing just what was done in the patent office.

"The Court. That would be the best evidence.

"Mr. McCarthy. The file wrapper doesn't show. You don't claim it shows the Morgan patent cited?

"Mr. Cary. It show what the patent office did, and if the patent office looked over the prior patents and came to the conclusion the Morgan was not an anticipation, it wouldn't cite it and it wasn't cited."

Of course, any expression of opinion by Mr. Reynolds, in the face of the file wrapper which is in evidence, was utterly incompetent.

Alleged irregularities in the patent office in relation to the issuance of an original or reissued patent must not only be pleaded but established by full and satisfactory proof in order to defeat the patent (Coffield v. Spears & Riddle, 169 Fed 641).

"Such office proceedings can only be impeached for fraud" (Coffield v. Spears & Riddle, 169 Fed. 641; citing Stimson v. Railroad Co., 4 How. 380; 11 L. Ed. 1020. Battin v. Taggart, 17 How. 77; 15 L. Ed. 37. Seymour v. Osborne, 11 Wall. 516; 20 L. Ed. 33).

* * * "the mere expression of opinion by an expert witness, based solely upon the examination of the file wrapper, that such irregularities may have existed, is wholly insufficient evidence to support any such charge" (Coffield v. Spears, supra.)

Mr. Reynolds thus testifying in the guise of an expert witness was really acting as an ancillary

counsellor and was arguing the case from the witness stand.

At R. 120 it was shown that he was a retained attorney on behalf of the Washington Iron Works (not a party to this suit), who had been notified of infringement of the Gilchrist patent, and that while testifying then on the stand Reynolds had in his hand a report which was dated April 14th, 1919. Reynolds says:

"I had an investigation made and wrote a report covering the question of infringement, which report was dated April 14, 1919, and it is this report which I now have in my hand. This was done, not for Mr. Mallory, but for a Seattle firm."

The questionable position of Mr. Reynolds is indicated by this inquiry, directed to him by the Court (R. 147):

"The Court. As such attorney, are you interested in any litigation or probable litigation in-

volving the Gilchrist patent?

I have not been spoken to by anybody with reference to any litigation that is contemplated in the matter. I did, as I said before, make a report—

"Court. I know you said expert.

As an expert, pass upon the question of infringement. Aside from that, that is the only thing that has had any connection with the Gilchrist patent.

"Q. In that connection, who was it requested you to pass upon that question?

"A. That matter was referred to me by an attorney in Seattle.

"Q. Was not by any direct employment of

any company?

No; it was by a practicing attorney in Seattle, for a client of his."

Of course, the fact that Reynolds was employed by another attorney in an associate capacity merely evaded the question of the Court. Clients do not ask attorneys for opinions as to patent infringements for the mere fun of the thing any more than one is accustomed to have a report on title when in some way the party is not vitally interested in the property in question.

THE PROPER FUNCTIONS OF A PATENT EXPERT.

"Since Letters Patent are contracts, questions of construction are questions of law for the judge, not questions of fact for the jury. As it cannot be expected, however, that judges will always possess the requisite knowledge of the meaning of the terms of art or science used in Letters Patent, it often becomes necessary that they should avail themselves of the light furnished by experts relevant to the significance of such words and phrases. Such is especially the case when *electric*, *magnetic* and *chemical* patents are involved. Some courts have held that is is proper to disregard patents put in evidence to prove anticipation when they are not explained. Experts are not required and, in fact, the use of their testimony is discouraged in cases in which the mechanical details are simple and the issue of infringment sharply defined. The judges are not obliged to follow blindly the testimony of experts. They may disregard it if it appears to them to be unreasonable. While the testimony of experts relevant to the meaning of particular words or phrases in Letters Patent, is to this extent admissible, such testimony is inadmissible on the question of the construction of the Letters Patent as a whole." (Italics ours.)

Walker on Patents, Section 189, page 259.

In Section 498, Walker says:

"Experts in patent cases are mainly experts in mechanics, chemistry or electricity; and a man who has extensive theoretical and practical knowledge of either of those sciences, is a mechanical, chemical, or electrical expert, as the case may be; and a man may be an expert in any other science, who possesses the same qualifications in it. The opinions of such experts are admissible upon the points of fact to which they are relevant; but in order to have much weight, they must be accompanied by statements of good reasons upon which they are based.

"And testimony based on experience is more weighty than testimony based on the theoretical consideration."

In Section 499, Walker says:

"No expert can know whether a particular thing, done or made by a defendant, is the same as anything covered by a particular patent, until he ascertains what that patent covers. But the latter question is one of construction for the court, and not a question of evidence, to be sworn to by an expert, and decided by the jury " A statement of a witness that a particular thing does or does not infringe a particular patent, is inadmissible in evidence, because that statement includes a construction of

the patent, and construction of patents is the duty of courts, and not of experts."

As a matter of fact, expert testimony in modern patent practice has come, by reason of its manifested abuses in the past, to have a pretty bad name as such. Expert testimony when it is really based on knowledge and experience; in other words, the testimony of a practical man, is often valuable and, indeed, indispensable, as Walker says; but to have a patent lawyer take the stand and simply argue the case and present a brief on what the claims in his opinion mean and what they do not mean is a pernicious practice and one that should be checked.

This is particularly harmful in a case of this sort where it is not expected that the trial Judge may be wholly familiar with the intricacies and complexities of patent law and practices. There is no more reason why a patent lawyer should be permitted to go on the stand and give his opinion on the application of the law and the facts in suit than should any other lawyer in any other kind of a case take the stand and argue what the law is, under the cloak of an expert witness.

CONCLUSIONS.

In asking this Court to reverse the decree of the lower Court with respect to the 1910 Gilchrist patent, we do so on the ground that it is manifest Gilchrist did invent something of manifest merit that filled a long-felt want in one of our great industries. If he made an invention he is entitled to protection. The infringement being servile as well as willful gives practically no occasion for the invocation of a broad interpretation of the doctrine of equivalents. If the patent is valid, as we insist it is, then infringement follows as a matter of course. As far as we know infringement is not denied.

Plaintiff asks for nothing more than a construction of the claims adequate to protect the actual invention in view of the actual advancement made in the art. The rule in such cases is well settled.

"When the patentee has produced a structure which inaugurates a new industry and at once becomes popular, and therefore of great value, the Court should be zealous so to construe the claims as to give validity to what it believes to be a meritorious invention."

Coxe, J., in Auto Vacuum Freezer Co. v. Sexton Co., 239 Fed. 898, 900, 901.

See also

Topliff v. Topliff, 145 U.S. 156;

Klein v. Russell, 19 Wall. 433;

Columbia Wire Rope Co. v. Kokomo Co., 143, Fed. 116-124;

Keystone v. Adams, 151 U. S. 139.

Finally, we call attention to the case of Hildreth v. Mastoras, decided November 7th, 1921, by the Supreme Court, 66 L. Ed. (Advance Opinions 1921-1922, December 1st, 1921, page 50). There Chief

Justice Taft gave great weight in upholding the patent to the shortcomings of the prior act and the hearty reception accorded the patented invention by the public; even although the operativeness of the Dickinson patent in suit had at all times been a serious question. There were various other considerations running in favor of the defendant and still the patent was held valid and infringed.

Speaking of the *practical advance* made by the Dickinson patent, the Court said (page 52):

"By these new devices the art of candy making has been revolutionized. Some kinds of candy, which, if pulled at all, had to be pulled when cold, could not be pulled by hand, because it required more than man strength; but they are now pulled by power machines. The production of candy has greatly increased, and 90 per cent of all the pulled candy made is pulled by machine."

And, again (page 54):

"The history of the art shows that Dickinson took the important but long-delayed and therefore not obvious step from the pulling of candy by two hands, guided by a human mind and will, to the performance of the same function by machine. The ultimate effect of this step with the mechanical or patentable improvements of his device, was to make candy-pulling more sanitary, to reduce its cost to one-tenth of what it had been before him, and to enlarge the field of the art. He was, therefore, a pioneer."

Furthermore, in holding that a machine that will accomplish such results ought not to be too nar-

rowly construed in the light of the so-called prior art, the Court said (p. 53):

"The Circuit Court of Appeals held the claim of Dickinson to be limited by a prior patent to Firchau for a candy-working machine, applied for in March, 1893, and issued December 19, 1893. * * * The Firchau device never, so far as appears in the record, made candy experimentally or otherwise. Indeed, no candy was commercially pulled by machine before or after the issuing of the Firchau patent in 1893 until the introduction of the Dickinson principle, nine or ten years later."

Chief Justice Taft furthermore indicates that too much stress should not be put on any particular word or phrase in a claim even in the face of Patent Office objections and amendments, where the effect would be to deprive an inventor of his just desserts; the Court saying:

"Counsel for the respondent, in seeking to narrow the construction of the broad claim of Dickinson, rely on the circumstance that one of Dickinson's claims in the Patent Office was canceled on a reference to Firchau. The canceled claim of Dickinson was:

"'In a candy-pulling machine, in combination, a series of pins or pulling members, and automatically acting means for causing said members to feed the candy to each other and pull the same."

"The Examiner evidently considered that the word 'series' might be held to cover a device with only two pins, as shown in the Firchau patent; though, having in mind the essential elements of the Dickinson patent, it could hardly have borne such a construction. How-

ever that may be, as neither Firchau nor anyone else has shown, with two pins only, the in-and-out movement in pulling candy which is the fundamental element of the Dickinson invention, the cancelation does not seem to us important, or to require a narrowing of Dickinson's claim for the described and indispensable co-operation of three or more pins to produce that movement."

Of course, in the present case there is no question of estoppel by Patent Office actions, because the patent was allowed substantially as drawn; but on the question of efficiency (or *inefficiency*) in the prior art, the two cases run parallel.

We respectfully submit that the decree of the lower Court should be reversed with costs on this appeal.

Respectfully submitted,

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